Ecological Society Newsletter

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FROM THE EDITORS

Hi all.

We will make this brief because this newsletter is a doozy! After a slow start and an extension of the deadline we have become overrun with last minute submissions and articles. Being generous and overworked types—we happily agreed to publish it all.

There are lots of interesting things to look for in this issue. We were pleased to receive responses to David Wardle's article on the Marsden fund from the previous newsletter; with several differing views (see letters to the editors). We hope that the newsletter can continue to be a forum for this type of discussion. We kick off a new column entitled "Invited articles" where we will be bringing you points of view from New Zealand ecologists. Thanks to Judith Roper-Lindsay (Boffa Miskell Ltd) for providing the inaugural article. We also welcome Robyn Sinclair (Macquarie University) to the team, who will be providing a regular update of goings-on in the Ecological Society of Australia.

Speaking of the ESA—did you know that at next year's conference we will be joined by them in Wellington? This promises to be a great event and there are opportunities for you to help! Alternatively, for an even bigger event consider helping out with the 2009 INTECOL conference in Brisbane! See articles below for details on these conferences.

The other highlight since the last newsletter has been the joint NZES and New Zealand Freshwater Sciences conference in Nelson in August, where we enjoyed meeting and networking with society members. Thanks go to the conference committee: Neil Deans, Trevor James, Simon Moore, Martin Rutledge, Karen Shearer, Peter Williams and Roger Young. Thanks also to Laura Young from Canterbury University who did an excellent job organising the student day. We asked several people to share their comments on this year's conference for those who were unable to attend; thanks to Olly Ball and Daniel Gulliver for their contributions.

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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.

INSIDE:

LETTERS TO THE EDITORS

Replies to David Wardle: Is the Marsden Fund Currently Working in the Interests of New Zealand Ecology?

David Wardle's article in the June issue of the Ecological Society Newsletter makes two criticisms of the Marsden Fund's Ecology, Evolution & Behaviour panel. The first is that the panel membership has changed in recent years and that the expertise balance has become strongly weighted towards molecular research. Dr Wardle states that he has little confidence in the panel's ability to assess ecological proposals, particularly those focused on terrestrial ecology. His second criticism relates to conflicts of interest on the panel, particularly when assessing proposals from current panellists, and questions whether these have been managed properly.

Dr Wardle's observations about the expertise balance on the panel are correct. There has been less ecological expertise on the 2004 and 2005 panels than in previous years. However, it does not necessarily follow that this has negatively affected the prospects of ecology proposals. Panellists are chosen, not only for their specialist expertise, but as generalists and with regard to previous panel or committee experience and their ability to make objective judgements. To demonstrate that there has not been any bias towards or against ecology proposals, an analysis has been made of all proposals submitted to the EEB panel over the five year period 2000 to 2004. Proposals were classified as either ecology, evolution or behaviour by the Research Classification Codes (RCC Codes) submitted by the applicants, and the relative success rates for the three groups calculated. Although overall success rates varied from year to year because of the amounts of money available, within each year there was no difference between the success rates for the three groups.

Further, the terrestrial ecology proposals were examined as a subgroup of the ecology proposals. Again, there was no difference in the success rate for this group, compared with all other proposals to the panel. We could find no evidence to support the claim that ecology proposals have been disadvantaged by the changes in panel membership in recent years. Equally, there is no evidence that proposals involving molecular research are being advantaged.

The Marsden Fund Council and the Royal Society of New Zealand are conscious of the need to maintain a suitable balance of expertise on the Marsden Fund panels. Two panellists are due to retire from the EEB panel at the end of the year and it is expected that at least one of these people will be replaced by someone with an ecological background.

The second criticism relates to conflicts of interest. In a small scientific community such as ours which is trying to manage an excellence-focused fund based on peer review, these are certain to arise. The Marsden Fund Council has developed a code of practice for dealing with conflicts of interest. The action taken depends on their level of seriousness. The difficulties in allowing panellists to be applicants are acknowledged, but conflicts of interest, when they arise, are carefully managed to ensure that panellists do not receive favourable treatment. It might be possible to avoid conflict by not allowing bidders to be panellists or Council Members, but this improvement would be offset by having to draw peer reviewers from those unlikely themselves to succeed with a bid. Marsden Fund Council members, who are appointed by the Minister of Research, Science and Technology, are permitted under the terms of their appointment to submit applications. Specific permission was given to ensure that prominent, active researchers would allow themselves to be nominated for Council membership and this extends to selection for panel participation. As most Council members are also panel convenors, it would be unfair if other panel members could not apply too.

This situation is managed by the panels operating under strict guidelines for handling conflicts of interest. If a panel member is an applicant, they are excluded from any part of the assessment of their proposal. They leave the room when it is discussed, and their paperwork for the meetings is amended to remove any indication of scoring or comment by other panellists. Furthermore, no information about the success or otherwise of their application is conveyed to the panellist until the normal public announcements are made. In addition, the Chair or Deputy Chair of the Council, who may not necessarily have subject expertise, is present primarily to act as an independent observer. Some of the suggested behaviours speculated on by Dr Wardle would be transparent and dealt with immediately if they did in fact ever occur.

It should be recognised that panellists are not "average" applicants. They are selected for panel membership because of their high research profile, often reflected in their past success in applying for research funds such as the Marsden Fund. An analysis has been made of the success rate for applications from EEB panellists over the five year period 2000 to 2004 to determine whether these people were more or less successful with their applications to the Fund, before they became a panellist, while they were a panellist and after they had been a panellist.

Not unexpectedly, this group of people had success rates 2 to 3 times greater than the "average" applicant. Importantly, there was no statistical difference between their success rates while they were current panellists

compared with the period before they became panellists, or even after they had been a panellist.

Dr Wardle noted in his article that just 4% of Standard proposals to the EEB panel in 2004 were successful and that 3 proposals from panellists were chosen for funding. He speculated that EEB panellists received an advantage with proposals from panellists having an over 50% success rate. His calculation of panellist success rate is not correct.

Dr Wardle's observations are based on the 2004 funding year. This was a year in which only 71 proposals were funded across all panels, the lowest figure for many years. Only 9 proposals were able to be funded by the EEB panel, 2 Fast-Start and 7 Standard proposals. There were in fact 9 proposals to the EEB panel which involved EEB panellists. Three of these were eventually funded. One is counted in our system as half-funded as it was also selected through an independent assessment by the SOC panel and therefore partly funded by that panel. Dr Hill, the then Chair, was present at the EEB panel meetings. Because of the very small numbers involved, statistically the success rate of 28% (or 33% if the half-funded proposal is fully counted) is within the range expected for applications from researchers chosen to be panellists.

The Marsden Fund Council acknowledge that conflicts of interest occur but is also satisfied that conflicts of interest have been well managed, and that no bias or favouritism has been shown to proposals from current EEB panellists. Should any applicants have a complaint about the success or otherwise of their own bids, conflict or any other such issue, there is a well publicised disputes procedure which is available in which the current Council's decisions are subject to third party review. This process has not been followed by Dr Wardle.

We are conscious of the impression given by having rules which allow panellists to also be applicants to the Fund. Conflicts of interest will continue to be carefully and strictly managed and where possible we will continue to appoint people to the panels who do not intend applying to the Fund in the near future.

In the 2005 funding round there were only 5 applications from current EEB panellists to that panel compared with 9 the previous year. With the increase of funding received in the recent Budget taking the Fund up to $38 million, the outlook for the Fund is positive and it is hoped that it will be possible to fund more proposals in 2005 and in future years.

D K W Smith
Manager, Research Funding
Royal Society of New Zealand
5 September 2005

Don Smith, the Manager of the Marsden Fund, addresses several issues raised by David Wardle regarding the Ecology, Evolution and Behaviour (EEB) panel, I wish to comment further regarding the question: Is there a 'heavily molecular' bias among panellists that disadvantages ecology?

Wardle notes that a majority of EEB panellists use molecular techniques in their own work, but does not address how common the use of molecular techniques is among ecologists in New Zealand or worldwide, and whether this might be appropriate. My own observation is that ecology, like the rest of the biological sciences, has seen the steadily increasing use of molecular techniques contribute to new insights across the entire discipline. Most young ecologists learn and use molecular skills as part of their training, just as they learn skills in microscopy and statistics. Ecologists no longer need to rely on theory alone to understand such topics as gene flow or mating systems, when genetic tools can define, relatively precisely, the movement of genes or maternity/paternity in a brood of birds. Ecologists still study the same issues, but the range of techniques continues to expand, and the Marsden Fund would not fulfil its brief without acknowledging these in the expertise of panellists.

As an example of the apparent failure of the EEB panel in its duty to ecology, Wardle cites a range of prestigious ecological journals (Ecology, American Naturalist, etc.) in which few panellists have recently published. While the Marsden Fund expects successful applicants to publish in top specialist journals, we also seek to select proposals that may be of broader scientific interest or that can provide new insights into particular disciplines. As convenor of the EEB panel, I sometimes propose to panellists that one touchstone for selection be defined as the potential to generate a cover story for Nature or Science, journals that reach a far wider audience than just ecologists. In Kuhnian terms, we can seek proposals whose findings may challenge paradigms rather than those that work in the realm of 'normal' science. This is consistent with the objectives of the Marsden Fund to 'contribute to the global advancement of knowledge' and to create 'increased opportunity to undertake excellent investigator-initiated research'. It is also consistent with the general goals of the fund to 'support excellent research and researchers' that seek 'profound or unexpected discoveries'. The Fund does not exist to support a particular field of science, but to support scientists who work at the forefront.

Wardle notes that 'the Marsden Fund… is explicitly intended for fundamental… ecological research', but he appears to mean only terrestrial research, stating that a 'large range of terrestrial community, ecosystem, environmental, soil, and plant-related work is therefore excluded' from panel representation. The EEB panel's

brief is far wider, including obviously evolution and behaviour, but less obviously marine and freshwater biology, oceanography, psychology, ecological and evolutionary genetics, physiological ecology, zoology, botany, microbiology, extremophile biology, and palaeontology. As Don Smith notes, panellists are selected as generalists, but most have fundamental training in ecology. Terrestrial ecology is better represented in expertise than almost any of the other disciplines noted above.

Most Marsden panels have eight members, but the EEB panel has nine, to allow for a broader range of disciplinary expertise. The primary basis for selecting panellists is to obtain an appropriate range and balance of disciplinary expertise. Where possible, we also select panellists with the aim of maintaining a balance of expertise from universities, Crown Research Institutes (CRIs), and genders. Of the seven panellists added in the past two years, the range of expertise includes evolutionary biology (two panellists), sensory biology, ecological physiology, population ecology, marine biology, and plant ecology. Three of the seven new panellists are from CRIs, as was my predecessor, and two are women. Wardle objects to 'the exclusion of Landcare Research from the current EEB panel'. This is untrue, as a Landcare scientist (a terrestrial ecologist) was appointed in 2004, but unfortunately that person left after only one year of the normal three-year term. Wardle's statement could be interpreted to mean that Landcare somehow deserves guaranteed representation. Marsden Fund panellists are chosen on individual expertise; institutional representation is not a right.

As convenor, I consider the disciplinary balance of the panel to be important, as Wardle does. During the past two years, I have worked to ensure that the disciplines covered by the EEB panel receive fair representation and that other balances are achieved. The modest size of the panel, the wide range of disciplines covered within our brief, and the planned and unplanned departure of panellists guarantee an inevitably shifting landscape.

Professor CH Daugherty
Convenor, Marsden Fund EEB Panel
Professor of Ecology –
Victoria University of Wellington

Lottery science—yeah right!

The suggestion by David Wardle in the Ecological Society Newsletter Number 113, that the success rate for Marsden Fund Ecology, Evolution and Behaviour panellists in the last bidding round was probably over 50%, versus just 4% for non-panellists, was so disturbing that I sought accurate data from Fund personnel. Also, the failure of 'small bidders' to win any funding at all in the just completed pilot Ecosystems bidding round, run by the Foundation for Research, Science and Technology, led to a similar inquiry. The results for both Funds are very disturbing, and bode ill for the future of 'small bidders' seeking a fair go at gaining science funding in ecology.

The Marsden Fund

According to Don Smith, Manager of Research Funding for the Marsden Fund, which is administered by the Royal Society, in an e-mail to me on 6 July 2005, panellists had "success rates 2 to 3 times greater than the "average" applicant. Importantly, there was no statistical difference between their success rates while they were current panellists compared with the period before they became panellists, or even after they had been a panellist". However, in response to my request for actual numbers, in an e-mail to me dated 7 July 2005, Don Smith said that 3 of 9 bids submitted involving panellists in the last bidding round, were successful, whereas 6 of 153 bids not involving panellists were successful.

These numbers mean that the panellist success rate was 1 in 3, and the non-panellist success rate was 1 in 25.5. Bids involving panellists were thus 8.5 times more successful than those submitted by non-panellists.

The Public Good Science Fund

When the Foundation for Research, Science and Technology was established in about 1987, allocation of funding was through a competitive bidding process with apparently equal opportunity to all bidders. All bids were sent to several other scientists for evaluation. After the establishment of the Crown Research Institutes in 1992, many 'small bidders', i.e. non-CRI and non-other large organizations, won funding for a wide range of research topics, in addition to those won by CRIs. For example, my count of contracts awarded by the Foundation in the Outputs: Environmental Protection, and Land Use, Flora and Fauna, in 1993/94 show that at least 9 of 66 were awarded to small bidders. Of the remainder, 27 were awarded to Landcare Research Ltd.

For the Ecosystems pilot Project bidding round completed just recently (which about covered the ecological Outputs in 1993/94), by my count there were 59 bids of which 14 were submitted by small bidders, 20 by Landcare, 11 by other CRIs and Canesis, and 14 by Universities. All Project funding was won by 6 bids, 4 of which were from Landcare, and 1 each from

Agresearch and Waikato University. In other words not one small bidder was funded.

Discussion

In sharp contrast to earlier bidding rounds, small bidders in the pilot Projects area were severely penalised from the start, because the new Outcome-based Investment (OBI) system de facto excluded them from bidding to the majority of the available funding. Mr. John Smart, Group Manager Investments for the Foundation, informed me in person that the Foundation was requested by the Government to develop a means of putting in place much longer-term funding for major areas of research, and as a result the multimillion dollar OBI bidding system was instigated. Most of the funding in the Ecosystems area was allocated for distribution to OBIs and only the remainder was available for much smaller Project bids. Also, the Board of the Foundation put in place 'investment signals' for Project bidding, and an internal evaluation system for the bids submitted.

Of course a consequence of the OBI system was that small bidders, who by definition would be unable to come up with multimillion dollar bids, were locked out of bidding to the majority of the available funds. But much worse than that, the new system allowed a failed OBI to be split up and re-bid into the Project area. Big bidders thus had two chances to be successful over the whole area, while small bidders had just one chance in a small part of the area. Also, some of the 'investment signals' eliminated some areas in which small bidders had previously been funded. But more than that, the bids were assessed in-house by assessors appointed by the Foundation.

How did this grossly unfair system come to be put in place? Well in 1999 the Government appointed Dr Andrew Pearce, the recently retired CEO of Landcare, to the Board of the Foundation, and he is now Deputy Chairman. So bidders who did not belong to Landcare were bidding to a fund which had the CEO of the biggest bidder in a very powerful position on the Board. By far the most successful OBI and Project bidder was Landcare, and according to a Landcare Manager, they are now a million dollars ahead of where they were prior to this bidding round.

Of course the Government owns the CRIs, and undoubtedly wants them to succeed financially. But Steve Maharey, the Minister of Research, Science and Technology said in a letter to me of 13 July 2005, that he does not believe that "the presence of any particular Board member had any bearing on the outcome of decisions relating to organisations with which they were associated". Well he would say that wouldn't he.

We have all heard the term 'lottery science' in regard to the chance of obtaining funding, and the overall belief has undoubtedly been that funding has been allocated through processes that have been fair, with an equal chance of success for all, depending on the values of a range of assessable and comparative factors. But now we find that for different reasons, some bidders have been far more equal than others. In other words, if obtaining funding has been a kind of lottery, it certainly hasn't been a fair lottery. In fact there seems to be plenty of evidence that neither fund has been a real lottery at all.

Whether or not this conclusion is correct, for the good of New Zealand science urgent steps must be taken to show that bidding to both funds will be fair to all. For this to happen, the bidding systems must be transparent, and must be seen to be so. Otherwise for the Marsden Fund the first move by non-panellist bidders will have to be to try to become a panellist, or failing that, try to include a panellist in their bids, and for the Ecosystems area, well for small bidders try to join Landcare, or forget it.

So what can be done? Well for the blue-sky Marsden Fund to get rid of personal bias let's turn the allocation process into a real lottery. After all, one person's perception of what deserves to be investigated, and what is excellent ecological research, usually differs greatly from that of others. So why not restrict the panellists to simply ensuring that submitted bids conform to the broad parameters for the area under consideration, and to the scientific method. Then, under police supervision, have all bids allotted a number, and have numbered marbles drawn from a barrel. Then we really would have true lottery science.

For the Foundation, members of organisations bidding to the fund must of course be excluded from everything to do with the putting-in-place and running of the bidding process. Big science is now big business, and in the 'business' business world any suggestion of insider trading is a total no-no, with severe penalties imposed on the guilty. So why on earth is even a remote suspicion of such a situation tolerated in what is supposed to be a fund open to all-comers on an equal-chance basis? There are plenty of ecologists and other scientists who are retired and who could sit on the Board and on assessment teams. After all, retired judges are frequently recalled for important short-term legal assignments, so why can we not do the same in science?

The grossly unfair outcomes of both the Marsden Fund and the Foundation bidding rounds smack of systems that have for too long gradually deviated from what we probably all believed was their original intentions—the just and fair allocation of funds. The systems must be corrected as soon as possible, otherwise there will be one more reason, and a very major one, to advise young people not to consider science as a career. Unless something is done very quickly to restore our faith in science funding processes, those not on the inside will continue to be severely disadvantaged.

For example, who in their right mind would bid to the Ecosystems area in 4 years unless there are major corrective changes?

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Replies to Dave Kelly: Conference Bags, for what?

Dave Kelly is right; conference bags do seem a bit trivial and at worst wasteful. I recognised some old classics in his photo collection. Though with a bit of imagination some use can be found. e.g. the IWMC 2003 bag transformed nicely into a laptop bag I still use today to lug the beast on the half hour walk from carpark to uni (which is another Auckland story altogether).

James Russell
University of Auckland

Not all conference bags are created equal

I was amused to read Dave Kelly's epistle on the topic of conference bags. I confess to being in two minds about them—on the one hand, I get rid of a small stack every time I shift continents; but on the other hand, I can think of four very disparate ones still in general use. The first is Dave's 'overgrown clutch purse' from the NZES/ESA joint meeting in 1998. It is perfect for taking a large stack of articles, exams or journals on holiday where they will never be read. My next favourite is the bag from Southern Connections in Cape Town last year. This is a medium-sized shopping bag with a zipper, and is exactly the right size to carry my lunch and other miscellany from home to work. Then there are the two very nice backpacks received in quick succession. Like all good kiwi ecologists, I have a daypack with a volume of about 30 litres, and coated with the assorted grime of countless fantastic days in the hills. Thanks to these conferences, I now have a bag that is somewhat presentable for walking about town as well (and so does my fiancée), and I don't have to tear my first aid kit, spare polypro and gloopy sunscreen out in order to fit in a jumper, my sunnies and a book. On the flip side, there is the stupid asymmetric backpack with cellphone holder (not my style), and dozens of stupid plastic envelopes, and I think I am now at saturation for the number of bags I can conceivably use in my life.

From the looks of the door handles in the kitchen, every North American ecology conference my flatmate has ever been to has presented her with a robust, big cotton bag perfect for the grocery shopping. In fact, most times we don't need to use any plastic bags at all, even when we refill the fridge after months of neglect. I have also recently attended a large conference (of the sort that usually provides too many freebies), and didn't get a bag at all. And it worked fine—I had my free conference backpack with me, and it went another round. So I guess the moral of the story for conference organisers should be to 'make 'em useful or don't make 'em at all'. Perhaps one could tick a box on the conference registration to indicate whether or not a bag is required?

By the way, I'm currently in the market for a chiller that will hold three bottles of wine… now that would be a conference bag I'd definitely use!

Brent Sinclair
Biological Sciences, University of Nevada, Las Vegas

NZES/NZFSS CONFERENCE WRAP-UP

Comments from NZES Members

Having only ever been to the two preceding Ecological Society Conferences, my comments on the 2005 conference are not based on vast experience. But I do have some observations that I would like to share. But before I do, thanks go to the organisers for their great efforts in putting the conference together.

Was there a noticeable paucity of Ecological Society papers? Yes, for whatever reasons, pickings were fairly slim and that may be an understatement. There were certainly some thought-provoking highlights (acoustic anchors, moa feeding ecology, forest bird ecology, avian malaria, blue duck roosting habitats, and herbivore impacts spring to mind), but papers challenging the broader ecological concepts were not as common as they appeared to have been in the past two years.

However, the disappointment in the lack of talks was somewhat tempered by relief when I discovered that I would not feel obliged to attend every talk or to clone myself so that I could attend unmissable concurrent talks. Also, the opportunity to pick the brains of those with some seemed to present itself more often than in previous conferences. I think the handy nature of the venue in relation to the accommodation and of Nelson itself, as well as the less intense schedule, had much to do with this.

Did the joint conference work? It may not have been a raging success, but for me, it most certainly was not a disappointing failure either, and as a closet freshwater ecologist, I certainly appreciated the opportunity to pick the brains of our watery friends too.

Do I regret coming to the conference? No way.

Will I present something next year? I should!

Olly Ball,
Northland Polytechnic

As a second year masters student this was my first NZES conference. And I would have to say I had a great time. The realisation that people whose research you had spent the last few years learning about and studying, were in fact not god-like figures, but normal very down to earth and approachable people. This was a revelation for me and very inspiring. Obviously I cannot comment in comparison to previous years, but I thought the conference ran smoothly and was well organised; full credit to the organising committee.

Combining it with the Freshwater Sciences Society was a great idea. It meant we got to mingle with people we wouldn't necessarily have contact with, and learn about areas of research that are cutting edge and relevant to both areas. The combined topic for the conference was also a great as idea as it allowed a focus that was slightly more holistic which was definitely of value.

I would have to say however, that I was quite surprised by the low numbers of students that presented at the conference, whether it be poster or seminar. This possibly had something to do with the timing of the conference this year. While I presented a poster, given another month or two I definitely would have got a lot out of giving a talk.

The timing of some of the seminar topics also seemed to be unfortunate. There was one day in particular (Tuesday just before lunch I believe) that the two most relevant sessions of the entire conference for me ran concurrently, so there were several presentations that I would have loved to attend but could not. I'm sure this happens at most conferences, but a lot of people I have talked to seemed to share my view point.

Overall however I would have to say the conference was definitely a success. The location was stunning, with handy dirt cheap accommodation. And at the conclusion of the conference I felt I was refreshed, motivated and enthusiastic about my research and contributing to the greater scientific body of knowledge on the whole.

The student day on the Sunday was also very enjoyable and I felt was a great success. It meant it was a valuable practice for those students that were intending to give a talk during the main conference, and it meant we could listen to and learn about talks that we would not necessarily have attended later in the conference. It also allowed students to get to know each other, and mingle both during and after and the diner. Well worth doing!!

Will definitely do everything in my power to attend in future years

Daniel Gulliver
MSC Student, University of Auckland

Powerpoint talks from Nelson Conference are Online: www.nzes.org.nz/conferences/

All abstracts from this year's annual conference in Nelson are on our website at the above address. PDF files of the PowerPoint talks of most talks (those we have permission from their author(s) to share) are available for viewing until 1 December 2005. They will then be removed from the server so please print out the talks you are interested in before then.

Also now available are the conference programme's, including abstracts, for all previous conferences back to 1996 (with the exception of 1997—please let me know if you have a copy of this or earlier conferences in electronic form). By having this information online, these abstracts will appear in searches in Google (and other popular search engines).

Jon Sullivan
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NEW COUNCIL MEMBERS

Ecological Society Council; back row from left: Karen Denyer, Jon Sullivan (webmaster), Middle row: Shona Myers, John Sawyer, Alison Evans, Susan Timmins, Rachel Keedwell, Front: Mel Galbraith, Ingrid Grunner, Kate McNutt

The 2005 AGM has seen a couple of changes made to the NZES council: Mel Galbraith has come on board as a new councillor, Karen Denyer has been co-opted to develop the education role of NZES, and Laura Young has been co-opted as the student representative. A warm welcome to them! Mel has taken the opportunity to introduce himself to members:

I am a lecturer in the Bachelor of Resource Management programme in the School of Natural Sciences, Unitec New Zealand, with a focus on ecology, biodiversity conservation, biosecurity and freshwater systems. My interest in natural history, especially ornithology, was formalised through post-graduate

study at the University of Auckland. This interest has lead to involvement in many ecological restoration projects, initially on islands, but increasingly within urban Auckland. My application of ecology has been focused through 4 projects in particular—Tiritiri Matangi Island, the Miranda RAMSAR site, Chatham Island taiko expedition, and the Waitemata Coastal Sanctuary Project (North Shore City).

I am active in the Ornithological Society of New Zealand (Regional Recorder, Auckland), Supporters of Tiritiri Matangi (Biodiversity subcommittee) and the Uruamo Ecological Society (Chairperson). I am also a member of the Environmental Institute of Australia and New Zealand, and a past member of the Auckland Conservation Board and the editorial board of the Journal of Landscape and Urban Planning.

Mel Galbraith
Unitec New Zealand
Auckland

ECOLOGY ACROSS THE TASMAN 2006

Joint conference: New Zealand Ecological Society and the Ecological Society of Australia

Dates: Sunday 27 August – Friday 1 September 2006.

Venue: The Rutherford Centre – a down town part of Victoria University, Wellington

Following the highly successful Cairns conference in 2002, another joint conference is planned with our Australian counterpart. There will be key note speakers, jointly run symposia, sessions for contributed papers, a student day, plenty of social events and field trips pre and post conference. With the combined forces of the two societies, we anticipate an excellent line-up of speakers plus opportunities to meet and talk with ecologists from New Zealand, Australia and further afield.

Some symposia topics have already been offered: Changing environments; Multiple herbivores; Sub-Antarctic islands; Ecological services and human health. If you have a suggestion for a symposium topic and/or would like to organise a symposium, contact Murray Williams (murraywilliams@paradise.net.nz).

A big range of field trip are being planned. If you would like to help with this, contact Clayson Howell (chowell@doc.govt.nz).

The merry band of people on the conference organising committee would gladly receive your offers of help, big or small. Rush your email to Susan Timmins (stimmins@doc.govt.nz) or John Sawyer (jsawyer@doc.govt.nz).

INTECOL 2009

NZ Volunteers are currently being sought to assist with the next International Congress of Ecology (INTECOL) Conference that is being held in Brisbane 2009. INTECOL is a jointly organised conference between the NZES and Ecological Society of Australia (ESA). We have jointly formed an INTECOL organising committee.

This will be the first time INTECOL is planned for the southern hemisphere so it is our chance to put NZ and Australasia on the map. It is anticipated NZ will feature heavily with pre and post conference fieldtrips and workshops. The most recent INTECOL was in Montreal in August (2005) which attracted over 4000 participants.

But we need assistance to pull this off! In particular we need people to be in assist with:

Scientific Panel: NZ ecologists good at networking and communicating to help with conference symposia topics and workshops in NZ.

Sponsorship Lead: this person needs to have had some experience with seeking funding/support. The Australian conference organisers are putting a sponsorship package together but we need someone based in NZ to follow up sponsorship opportunities.

Field Trips: individuals needed to assist with fieldtrip organisation. It is anticipated there would be a number of people around the country working together for this.

Conferences are not hard; they are just a lot of work! Even if you are not sure the above jobs are really "you" we need your help.

Any enquiries, please contact Kate McNutt at Environment Bay of Plenty Regional Council kate@envbop.govt.nz 0800 368 267 x9436

INVITED ARTICLES

Ecological consultants – filling a niche

The role of a "consultant" in any area is a mystery to many people.

In this article I want to look at the employment choices that lead to people becoming ecological consultants, what that job might entail, some of the problems they face in the job, and how quality control occurs.

What is a consultant?

One dictionary definition is simply "one who gives professional advice" (from which we can infer for this discussion, "for payment"). So broadly speaking, there are three types of "ecological consultant" in New Zealand:

- the ecologist who works alone or perhaps in association with one or two others; is generally home-based; and often is a specialist in some specific subject, geographical area or ecosystem type;
- the ecologist who works for a larger private company which may be totally ecology-focussed or may have other specialists in areas such as design, planning or engineering; this person may be either a general ecologist or specialist, depending on the nature and size of the company; and
- the ecologist working in a CRI, University or other research-based organization, who acts as a consultant as part of funding requirements, and who uses his/her research base as the source of expertise.

As a general rule, a consultant ecologist is paid to interpret or analyse ecological information (that is, facts) and use those facts as a basis for providing advice (that is, opinion) about planning for or managing some species, habitat or area.

Why does someone become an ecological consultant?

It seems to me that the people who enjoy consultancy are often those who like to contribute to team of professionals with skills outside the ecological area. They enjoy making an ecological input to a larger project, policy or development and learning about other disciplines. There is a regular challenge in understanding a variety of different projects and in providing rigorous ecological advice in terms that a lay person or non-ecologist can understand. Alternatively, consultancy brings you into contact with landowners who are working on their own properties to develop better land, water or biodiversity management.

Consultancy brings variety and flexibility—these are often associated with short time-frames and deadlines set by financial or legal constraints. It isn't always about pressured site visits, decision-making and report-writing, but it is usually about efficient use of a client's time and money.

What are the challenges for a consultant?

The challenges for an ecological consultant, as opposed to a research or teaching ecologist, come from a variety of sources:

The client. This person or representative of an organization is critical to your project. They set the objectives of your work, the required outcomes and the time-frame. Most importantly, they determine the budget. The client is a very varied creature. Sometimes s/he is a management agency with general ecological understanding but needing specialist help (for example DOC). Or it might be the staff member of a territorial local authority with responsibility for, but no knowledge about, biodiversity matters. And often it is a private individual or company needing ecological advice at the design, planning or management stages of a project.

It is important to build up a good relationship with your client, so that they understand the ecological issues, opportunities and limitations of their proposal.

Conservation groups. Perhaps surprisingly, these groups can be allies or opponents. Because the ecological consultant is paid by a person whom s/he advises, s/he may be seen as being an advocate for their proposal, and of ignoring ecological principles and values—of "selling out" to their client. Conservation groups often cannot afford to employ consultant ecologists, or choose to use their in-house or voluntary expertise.

The ecological consultant is regularly called on to make decisions based on value judgments, and may have to defend those decisions in the Environment Court. In these circumstances, the consultant has to take the scientific facts, and interpret them. Which leads to:

Facts, values and interpretation. This is probably the hardest part of the job of a consultant. You have to form an opinion—interpret ecological facts, based on your own environmental values, so that you can advise your client.

As a general rule, scientists who have similar types of training and experience do not disagree about the facts.

But just as in any interpretative process, there is room for a range of views. In fact, ecologists are just like any other people—they have a range of personal value systems, and a similar range of perspectives on how things should be managed.

To take an example in which the consultant ecologist is frequently involved: a landowner is seeking resource consent to subdivide and build on an area of land, within which there is remnant and regenerating native tree and shrub vegetation which has not been identified in a District Plan as "significant", even though the District Plan does address such issues. The landowner is likely to have to prepare an assessment of the effects of the proposed subdivision and buildings on the indigenous plants, animals, and ecosystem processes in the area.

Whichever ecologist s/he employs is likely to come up with more or less the same list of species and vegetation map—these are the ecological facts. Where the advice might differ is in how the ecologist interprets those facts and assess how the subdivision and building process might affect them.

That constitutes a value-based assessment.

Some things might be straightforward—for example the presence of a species listed on recognised databases as rare, threatened etc should lead to common assessments of the value of the land for those species.

But other things will be more open to interpretation — for example, whether the vegetation is important in a District context, given that it is not recognized as "significant" in the District Plan; and some matters quite open — for example the extent to which the presence of a house might affect particular invertebrates in the vegetation. The opinion and argument put forward by the consultant on these latter two points will depend on personal experience in the District or similar situations and, perhaps more importantly, the extent to which they believe that effects will be important in the wider picture of New Zealand biodiversity management. Adding to the opinion, will be the client's intentions regarding longer term management of the area, including mitigation, biodiversity enhancement or compensation.

So a consultant has to balance all these aspects in the advice to the client, and the assessment report that is written. It is this interpretation or opinion that is usually the subject of questioning by opponents to a proposal, rather than the facts.

Many consultants deal with advice that is not part of the planning process, and hopefully they will contribute to this part of the newsletter in future issues.

Quality control for consultants.

For ecologists in research and academic positions, quality control is achieved by refereed publications and other forms of peer review. For the consultant ecologist, especially a self-employed person or someone working in a company which is predominantly focused on other professions, maintaining quality of scientific standards or advice is more difficult. However, this is done through:

- Environment Court appearances — the cross-examination of witnesses in the EC is rigourous and while usually carried out by lawyers, does mean that a scientist's integrity and knowledge is tested in a very public forum.
- Employment history — larger environmentally based firms are discerning about the ecologists they employ. The standing and reputation of the company depends on the quality of the advice it gives.
- Experience — knowledge and understanding of ecological processes grows with time, and length of time working in the area, especially working with other ecologists is a good measure of quality of advice.
- Presentations and publications — these should not be the sole domain of researcher, although consultants are often limited in what they can speak about because of client confidentiality.
- CEnvP — there is now an opportunity for ecologists to become Certified Environmental Practitioners by a process of application, peer review and interview. The first batch of New Zealand candidates have just been interviewed, while there are about 60 CEnvPs in Australia (see website). Although this is a new criterion, it is one way in which any experienced ecologist can differentiate him or herself.

Final thoughts

After six years as an employee of a government department, I joined a consultancy firm about 18 years ago. I have enjoyed a variety of challenging projects over this time, and working with a wide range of people: social scientists, designers, and engineers; iwi committees, landowners and land managers, planners and designers; central and local government officers and even politicians! The biodiversity benefits, and working with project proponents who often know nothing about the environment, outweigh issues of budget and deadlines.

I could not do my work without the scientific research carried out in our many research institutions and universities; nor without attending conferences and talking to other ecologists and specialists — we need people doing all these aspects of ecological work. I see the consultancy work that I do as just one way of translating ecological science into management, applying scientific findings in planning and development. All these parts are important contributions to sustainable management of our environment.

Dr Judith Roper-Lindsay MIEEM, MEIANZ
Senior consultant ecologist and Principal,
Boffa Miskell Ltd in Christchurch.
These are her personal views.

NEWS FROM THE ECOLOGICAL SOCIETY OF AUSTRALIA

Ecological Society of Australia's report to the New Zealand Ecological Society

August/September 2005

The annual conference for the Ecological Society of Australia (ESA) is coming up in November and deadlines are fast approaching. The conference will be held from 29th November to 2nd December at the University of Queensland, in St Lucia, Brisbane. The opening plenary will focus on the effects of climate change on Australia and its biodiversity and will feature talks by Tim Flannery, Lesley Hughes and Stuart Bunn. The closing plenary will feature some early career ecologists, who will share their visions for ecology. The important upcoming dates for this conference are:

28 November: 5th one day post grad course on current ecology and evolution (run by Mark Westoby, Macquarie University).

29 November – 2 December: conference

2 – 4 December: Post-conference fieldtrips.

More information including all registration and symposia details can be found on the ESA website at www.ecolsoc.org.au and following the links. More information about the post graduate day can be found at www.bio.mq.edu.au/ecology/ESA2005/

Another upcoming conference of ecological mention is the Veg Futures 2006 Conference from 19–23 March in Albury-Wodonga (on the Victoria/New South Wales border). It is being held by Greening Australia (see www.greeningaustralia.org.au) in partnership with Land & Water Australia, CSIRO, the Joint Venture Agroforestry Program, the Australian Government Department of Agriculture, Fisheries and Forestry, and the Department of the Environment and Heritage. It will have a focus on practical demonstrations by researchers and landholders, and will be suitable for policy makers, direct seeders and anyone in vegetation management across Australia. For further details check out Greening Australia's website, or contact Haydn Burgess on hburgess@greeningaustralia.org.au.

Last year the University of Melbourne joined with Victorias Department of Sustainability and Environment to create the School of Forest and Ecosystem Science. It is based in Creswick (Victoria) and undertakes teaching and research in a broad range of disciplines all relating to environmental management. Within the school, the Bushfire Research and Development Group researches issues relating to fire management and ecology. Two such projects are being undertaken by post-doctoral fellows Karl Brennan and Fiona Christie, who are looking at soil and litter ecosystem functions following a fire, and ecological processes in the understory. Madeleine Osborn is studying a similar project on fungal diversity and related processes after fire. For more information on all the groups projects and publications, see their website at www.forestscience.unimelb.edu.au/research/bushfire/index.html, or email Alan York (alan.york@unimelb.edu.au) or Melinda Moir (mmoir@unimelb.edu.au).

That's all from me this time, but more details of the ESA and its members can be found on our website, www.ecolsoc.org.au or by emailing me on rsinclai@bio.mq.edu.au.

Robyn Sinclair

Robyn is a New Zealander currently living across the Tasman. She is completing her Masters with Lesley Hughes at Macquarie University in Sydney, working on the evolutionary ecology of leaf mining insects www.ecolsoc.org.au/What%20we%20do/Prizes/documents/RobynSinclairPoster.pdf

ECOLOGY STUCK ON THE WEB

3: Dr. Google

With tools like Google's search engine (www.google.com), the whole messy world of the internet (or at least most of it) is almost instantly at our finger tips. I'm still amazed by Google's magical ability to list useful links first. The problem is that a lot of web information is not terribly reliable. It is hard enough teaching undergraduates not to trust everything they read in the newspaper or hear on TV. The internet magnifies nonsense a thousand fold.

When I'm searching for reliable information in my research (the polar opposite of www.theonion.com), I have traditionally begun by searching for published scientific papers using a library citation database like Web of Science or CAB Abstracts. These let me search through just the scientific literature. One problem with these otherwise excellent services is that they cost a lot.

Or, rather, the problem is that because they cost a lot, they are not widely available. Even a small academic institution like Lincoln University can only afford to subscribe to Web of Science back to 1993 (its science citation index is now available, at a price, back to 1900). Another problem is coverage. The Web of Science may index about 8,700 top journals but it still misses many of the smaller, independently published, publications like the New Zealand Entomologist.

Enter Google, stage right. Google has swept into a scene previously dominated by expensive services with its free Google Scholar service (scholar.google.com). While still in development (as Google Scholar Beta), it is already online and is already very useful. While I still use services like Web of Science to exhaustively search the big journals for recent literature, I now find myself going to Google Scholar first for most of my searches.

Google Scholar has four advantages over our local library services. It allows me to go back in time further than our library can afford to do with the Web of Science. It includes the New Zealand Entomologist and other smaller, independent publications (as well as book chapters, reports and other online science publications). Like the regular Google search engine, it indexes the full contents of online PDF articles so you'll find something even if it is not mentioned in the title or abstract. And it's free. Ecologists not based at research or academic institutions can now search the scientific literature.

To give you a feel for the difference between Google and Google Scholar, here's an example. Let's say if I wanted to know about garden weeds in New Zealand. When I type "garden weed zealand" into Google, the first of 420,000 hits is for a New Zealand mail order nursery declaring that "a weed is but an unloved

flower." The top ten hits are New Zealand gardening websites talking about weed control, except for one DOC webpage.

In contrast, when I type the same search phrase into Google Scholar, I get 2,680 scientific publications. Among the top ten hits are two DOC weed reports, two New Zealand Journal of Ecology articles on weed ecology, a book chapter on New Zealand weed eradication, and a review of Roy et al.'s excellent book, "An illustrated guide to common weeds of New Zealand".

So if it's science you want, check out Google Scholar. (For those of you already using Google Scholar, you might like to try www.randomwebsite.com. The result will be a lot less relevant.)

Jon Sullivan
Lincoln University
webmaster@nzes.org.nz

NOTABLE ACHIEVEMENTS

Peter Williams: new Honorary Life Member of New Zealand Ecological Society 2005

Peter Williams has been a member of the New Zealand Ecological Society member for 41 years, during which time he has attended most Ecol Soc conferences and regularly presented papers. Not just a member, Peter has served on council for 10 years, been Vice president for 1 year, conference convenor 1 year, and been on the editorial board of New Zealand Journal of Ecology for 6 years. But the impressive statistics don't stop there. Peter has been a practising researcher for 35 years, with Landcare Research and its precursor DSIR Botany Division. Over that time Peter has been a highly productive scientist, both in terms of topics researched as well as projects brought to completion and published—he has over 70 refereed scientific publications.

As a student Peter was heavily involved in the environmental movement. Indeed he was the only student representative at the first UN world conference on the environment in Stockholm. At that conference Peter saw a display on the science behind environmental issues. Our rabid pro-native ecologist made a pivotal decision to get into science rather than further involved in environmental politics. Eric Godley, then Director of Botany Division, DSIR was pleased with Peter's decision and offered him a job saying "for a while we thought we had lost you".

Peter, a true ecologist, has worked on a variety of aspects of plant ecology; earlier on tussock grasslands, threatened plants, conservation assessment of vegetation landscapes, relationships between vegetation and geology and latterly on weeds. Peter is recognised as a prominent scientist in weed ecology in New Zealand, indeed "Mr Weeds". His weed work has been especially focused on the ecology of invasive plants of conservation concern with topics ranging from autecological studies of new weeds, patterns of weed invasions, the role of birds in weed dispersal, the role of people in creating and distributing weeds, and the interactions between native and naturalised plants.

Peter's weed work has often been done in association with others such as Department of Conservation scientists and field managers. The results of these projects have often been translated by Peter into popular articles for Forest & Bird magazine or Protect or presented at workshops and meetings such as Biosecurity Institute seminars.

In the last few years Peter has conducted several collaborative research projects with weed ecologists in, for example, Australia and South Africa. He has also had several invitations to work in other countries helping them to establish weed risk assessment systems. So, Peter is now aiding and saving not only New Zealand native species but also those of other countries with the introduction and refinement of the weed risk assessment system Peter helped develop.

The Society has twin objectives of promoting the study of ecology and the application of ecological knowledge in all its aspects. Peter's career has been a fine example of doing both those things. For that, and in recognition of Peter's many contributions to ecology, we confer honorary life membership of New Zealand Ecological Society.

Susan Timmins
Vice President

David Given, Te Tohu Taiao Award for Ecological Excellence 2005

For many years, David Given has been a researcher, strategic planner, administrator and communicator. He has specialised in studies of biological diversity, conservation biology, taxonomy and ecology, ethno botany, and the sustainable use of natural resources. He has a strong belief in the fundamental place of nature in people's lives and the role of landscapes and biological diversity in a contributing sense of place and belonging for people.

David graduated with First Class Honours in Botany from Canterbury University and went on to complete a PhD on the taxonomy of *Celmisia* (Asteraceae). For many years he was in charge of the DSIR Herbarium and more recently he has been a lecturer at Lincoln University and has played a significant role in the work of the Isaac Centre for Nature Conservation. It came as no surprise to his friends and colleagues when he was recently appointed Botanical Services Curator for Christchurch City Council.

For many years David has been a well known contributor to New Zealand botany, ecology, taxonomy and conservation. Botanical societies, fern societies, garden societies, trust boards and other groups have greatly benefited from his expertise and tireless efforts.

David Given's role on national and international committees is legendary. To mention just a few, many will know of his leading role in the Friends of the Christchurch Botanic Gardens, his leading roles on Department of Conservation Recovery Teams, his significant work on the New Zealand Botanical Society Threatened Plant Committee and the Royal Society of New Zealand Biodiversity Committee. His international contribution to plant ecology, taxonomy and conservation is well known, particularly in IUCN circles. He plays a very significant role on the IUCN Species Survival Commission and has led many initiatives for that Commission.

It comes as no surprise that David Given has received many accolades for his work. The most recent has been the Peter Scott Award for Conservation Merit. He has also been a recipient of the Loader Cup (awarded by the New Zealand Minister for Conservation), was made a life member of the WWF in 1995, and was awarded a Lifetime achievement award for his outstanding commitment to New Zealand indigenous plant conservation by the New Zealand Plant Conservation Network.

Evidence for outstanding contributions to applied ecology, conservation and management come in the form of not only research publications but also his research projects and field work. Particularly important has been the early development of assessment systems for threatened plant species (with both national and international implications). He collaborated on the production of the first digitised vegetation map for a Sub-Antarctic island. Well known are his studies on the interactions between people and plants and ethno botany, ethics and tourism. He is currently engaged in work on strategic development of protective systems for biological diversity on private and primary production land, and on the role of conservation biological diversity in developing sustainable urban systems.

His long term field work has included vegetation studies of Fiordland, vegetation analysis of Campbell Islands, environmental impact assessments and recovery programmes for the Chatham Islands, and recovery programmes for endangered species in the eastern regions of the South Island.

David Given has made a significant contribution to research on New Zealand's plant ecology. In addition to his published books he has contributed about 60 chapters to other books; he has published about 65 papers in refereed journals, and has contributed to about 40 conference proceedings. Anyone who has published no less than 25 papers in the New Zealand Journal of Botany must be considered as someone who has made an outstanding contribution to New Zealand ecology.

Ian Spellerberg
Isaac Centre for Nature Conservation
Lincoln University

ECOL IDEAS SPOT

Request for information:

Tane's Tree Trust has been granted funding from the Sustainable Farming Fund to create a database which will hold references to all research involving the growing of indigenous species. The Trust will be searching archival records held by Archives New Zealand, Forest Research, the Macmillan Brown Library and other institutions which may hold data.

We have anecdotal evidence which suggests that, at the dissolution of the Forest Service, many staff saved material which would otherwise have been lost and may still hold this. Alternatively, retired officers may still hold material that they were working on.

The Trust would like to hear from anyone who holds indigenous research data, or knows of others who do. We are interested in recording this information and discussing its future care and storage.

Please contact Ian Barton at ibtrees@wc.net.nz; telephone 09 239 2049 or write to P O Box 1169, PUKEKOHE 1800

Banks Peninsula research registry

For more information contact Frances Schmechel, Coordinator, Banks Peninsula Conservation Trust, c/- Landcare Trust, PO Box 39-141, Christchurch. Ph 03 962-9555, email: frances@landcare.org.nz

Insects: what are the changes to native and beneficial insects on properties as native shelterbelts and native bush patches are re-established?

Insects: have native insects benefited as a result of the huge hedgehog 'bycatch' from trapping around Flea/Stony Bay areas?

Predator control: what, if any, are the responses of rat populations to control of other predators/pests (stoats, cats, possum, etc). Some predator/pest control work is currently underway around Flea/Stony Bays by landowners and DOC. If expanded or other areas initiated, what are the risks? Would rat populations expand, and if so would that be a problem? Note: there is a proposal to expand possum control to the entire Peninsula to maintain gains from recent control done by the Animal Health Board. What, if any, affects would this have on rat populations?

Tui dispersal: If there is enough food/habitat for tui, will they disperse on their own back to Banks Peninsula?

(Key questions—what are the dispersal distances of tui by gender, do they need or use habitat corridors, if so what are the linkages like between the nearest tui populations and the Peninsula.) [Background—desire to restore tui populations to Banks Peninsula, key question—will they re-establish on their own or do they need to be translocated?]

Regeneration rates: what are the natural regeneration rates of understorey on Banks Peninsula? Background—one farmer near Le Bons Bay fenced off a piece of bush on his property and the understorey regeneration has been disappointing. The over-storey is a relatively thick stand of mainly Mahoe. Is the lack of regeneration simply due to the site and species present, or are other factors responsible or contributing (occasional stock incursions, possum browse, rats, etc.)? Another example—Pam Richardson visited a farmer who had an area that's been fenced for 30 years and there has been no significant regeneration.

Stoat and rats along cliffs: are stoats and rats the main predators along cliffs? If so, what are the most effective means of control? Background: the last remaining mainland titi (sooty shearwater/muttonbird) colony on Banks Peninsula is being protected by a local farmer via fencing and trapping. He wants to find out more about the predators along the cliffs and how to best control them to protect the colony.

Bird populations: many residents have commented on the high numbers of tomtit, bellbirds and kereru around the Peninsula in recent years. Has there been an increase, and if so what is responsible? (Has the large-scale control of possum for Tb increased bird numbers?) If possum control is responsible for increased bird numbers, what will happen now that the Tb control has ceased?

Habitat linkages: tomtit, rifleman, and brown creeper are all present on the Peninsula, but not in Christchurch. What are the habitat linkages like between present populations and suitable habitat on the Port Hills and in Christchurch? Do these species need or use habitat corridors? If so, are there key areas where additional habitat would facilitate their restoration into the Port Hills/Christchurch area?

Weka and insects: what, if any, impact would reintroducing weka have on native invertebrate populations? Background: weka were proposed for reintroduction at Hinewai, but the project postponed due to concerns about the possible impact of weka on native invertebrates.

Rabbits: Is the predator control that is occurring around Stony/Flea Bays causing increases in rabbit numbers? [Background: Robin Burleigh has noticed, '… during my travels around the Peninsula that the highest number of rabbits I see are in the Flea/Stony/Otanerito areas! Therefore the reverse may apply here in that the ferret numbers being significantly reduced may have allowed a bounce back in rabbit numbers and an upsurge in Stoat and Weasels. I also have some anecdotal evidence that RCD may have impacted directly on Ferrets but can't get anyone to take much interest in this. My personal observations while out and about at night over here are that there are not as many Ferrets as previously seen but that is pretty inexact science. Dave Hunter has also made comments to the effect that Ferret numbers are generally low over here at the moment. What we need is some good baseline research to confirm or deny numbers…']

HOTSCIENCE

Gillman, L. N., and J. Ogden. 2005. Microsite heterogeneity in litterfall risk to seedlings. *Austral Ecology 30*:497–504.

Litterfall is an important cause of damage and mortality to seedlings in many forests. However, this study is the first to demonstrate variable risks of litterfall damage among different microsites. Artificial seedlings were 'planted' along transects in each of two New Zealand forests, and the overhead species recorded. The artificial seedlings were monitored monthly for damage over two years. The risk of damage differed significantly among microsites from 2% to 30% per y ($P < 0.0005$). Seedlings differ in resilience to litterfall (Gillman et al. 2003) and, therefore, microsites with different litterfall risks provide the potential for regeneration niche differentiation.

Urlich, SC; Stewart, GH; Duncan, RP; Almond, PC. 2005. Tree regeneration in a New Zealand rain forest influenced by disturbance and drainage interactions. *Journal of Vegetation Science 16*: 423–432.

Question: Does canopy tree regeneration response to difference large disturbances vary with soil drainage? Location: Old-growth conifer (*Dacrydium* and *Dacrycarpus*), angiosperm (*Nothofagus* and *Weinmannia*) rain forest, Mount Harata, South Island, New Zealand. Methods: Trees were aged (1056 cores) to reconstruct stand history in 20 (0.12–0.2 ha) plots with different underlying drainage. Spatial analyses of an additional 805 tree ages collected from two (0.3–0.7 ha) plots were conducted to detect patchiness for five canopy tree species. Microsite preferences for trees and saplings were determined. Results: There were clear differences in species regeneration patterns on soils with different drainage. Conifer recruitment occurred infrequently in even-aged patches (>1000 m^2) and only on poorly drained soils. Periodic *Nothofagus fusca* and *N. menziesii* recruitment occurred more frequently in different sized canopy openings on all soils. *Weinmannia* recruitment was more continuous on all soils reflecting their greater relative shade-tolerance. Distinct periods of recruitment that occurred in the last 400 years matched known large disturbances in the region. These events affected species differently as soil drainage varied. Following earthquakes, both conifer and *N. menziesii* regenerated on poorly drained soils, while *Nothofagus* species and

Weinmannia regenerated on well drained soils. However, *Dacrydium* failed to regenerate after patchy storm damage in the wetter forest interior; instead faster growing *N. fusca* captured elevated microsites caused by uprooting. Conclusions: Underlying drainage influenced species composition, while variation in the impacts of large disturbance regulated relative species abundances on different soils.

POSITIONS AVAILABLE

Volunteer Field Assistants wanted for ecological research on the West Coast

Would you like to work in one of the most stunning parts of New Zealand and gain valuable experience in ecological research?

Now, here's your chance!

I am looking for volunteers to assist with field work on the West Coast of the South Island from January to May 2006, as part of my PhD research supervised by Dr Raphael Didham. The aim of the project is to investigate the effects of landscape structure on exotic plant invasion into native forest fragments.

My study sites are native forest remnants in the lowland valleys of the Greymouth and Buller Districts. The work involves surveying plant communities in forest fragments, collecting soil samples, and conducting experiments on weed invasion processes.

Competence in the outdoors and a basic level of fitness are required. Plant identification skills (both native and introduced species) and experience with plot sampling methods are desirable but not essential. Enthusiasm and a keenness to learn about New Zealand plant ecology are important though!

Accommodation (in a house with power & hot water) and food will be provided, however I am unable to pay field assistants at this stage.

For those not from NZ check out the following websites for information about NZ & the West Coast:
www.mapquest.com/atlas/?region=newzland
www.west-coast.co.nz/140f.html
en.wikipedia.org/wiki/West_Coast,_New_Zealand
www.tourism.net.nz/new-zealand/about-new-zealand/regions/west-coast.html

If you are interested or have any questions, please don't hesitate to contact me, preferably before 15 November 2005.

Melissa Hutchison
PhD candidate
School of Biological Sciences
University of Canterbury
Private Bag 4800
Christchurch, New Zealand
Email: mah103@student.canterbury.ac.nz
Phone: +64 3 364 2987 ext. 7052

Teaching Assistant, Plant and Animal Ecology, Lincoln University

An opportunity exists in the Bio-Protection and Ecology Division at Lincoln University for a suitably qualified graduate to complete a PhD or MSc and provide academic support to lecturers in the area of Plant and Animal Ecology.

This position has been established so that a student receives an income while completing post graduate studies, in return for providing assistance with teaching, marking and tutorial work in the relevant discipline.

Applicants must:

- Be eligible to enrol for postgraduate study;
- Have a sound knowledge in one of the following fields,
  – Plant Ecology
  – Animal Ecology
- Have a strong interest in developing teaching and report-writing skills;
- Have a commitment to research.

If interested, please contact
Dr Hannah Buckley
Phone 03 325 2811, ext 8433
E-mail: buckleyh@lincoln.ac.nz

MEETINGS DIARY

New entries are marked with an asterisk.

*** 17 November, 2005**
Royal Society conference: Security and Biosecurity.
Wellington. Contact: Gill Sutherland, gill.sutherland@rsnz.org. Details: www.rsnz.org/

29 November – 2 December, 2005.
Ecological Society of Australia annual conference
University of Queensland, St. Lucia, Brisbane. www.ecolsoc.org.au/Conference/ESA2004/ESA2004.htm

*** 2 – 4 December, 2005**
Annual Molecular Ecology meeting
Wainui, Banks Peninsula. Contact: Adrian Paterson Patersoa@lincoln.ac.nz

6 – 10 December, 2005
Australasian Ornithological Conference
Blenheim. http://osnz.org.nz/conference.htm

11 – 13 December, 2005
Australasian Shorebird Conference 2005
Nelson. http://osnz.org.nz/conference.htm

3 – 6 March, 2006
Second International Meeting on Physiology and Pharmacology of Temperature Regulation
Phoenix, Arizona. Contact Karla.Scarf@chw.edu, www.FeverLab.net

*** 19–23 March, 2006**
Veg Futures Conference
Albury-Wodonga, Australia. www.greeningaustralia.org.au Contact Haydn Burgess hburgess@greeningaustralia.org.au

18–21 April, 2006
Australasian Plant Breeding Conference (APBC)
Christchurch. http://events.lincoln.ac.nz/apbc/

*** 12–16 February 2007**
International Association of Vegetation Science, 49th Annual Conference
Massey University, Palmerston North. http://iavs2007.massey.ac.nz

*** 1 – 30 August, 2009**
10th International Congress of Ecology (INTECOL),
Brisbane, Australia. www.intecol.net
Contact: kate@envbop.govt.nz

NEWS FROM COUNCIL

Editor's Note (Edited and abridged minutes)

Minutes of the NZES Council Meeting

30 August 2005, Rutherford Hotel, Nelson
Present: John Sawyer (Chair), Shona Myers (secretary), Rachel Keedwell, Susan Timmins, Jon Sullivan, Ingrid Gruner, Kate Mc Nutt.

Apologies: Alison Evans, Dave Kelly, Ruth Guthrie, Hannah Buckley

Treasurer's report

Rachel reported a healthy balance ($23,000 in cheque account, $80,000 on term deposit). Accounts are earning interest of 6.4% (approx $1000 every few months). The Kauri fund total is $3650.

Discussion followed about options for use of this surplus including adding money into the Kauri fund on a regular basis. The options would be discussed at the AGM.

Moved (Rachel) that $10,000 be put into the Kauri Fund plus all interest payments from term deposits until such time as the Council decides not to, seconded Susan, carried.

Shona to send information about Kauri Fund to Jon to put on web to advertise the fund more widely.

Journal editor's report

There was no journal editor's report. Volume 29, No.1 was published in June 2005.

Webmaster's report

Jon reported that all journal articles are now on PDF. Jon and Ruth Guthrie are drafting a poster to publicise the journal to go out to schools, libraries etc. Jon to present draft of poster at November meeting.

There was a discussion about changing the website address to www.newzealandecology.org.nz. There was general agreement that this should be pursued.

Conferences

1. Intecol Conference
Kate reported that the conference would be held in Brisbane in 2009. It is the first time it has been held in the Southern Hemisphere. She discussed the structure of the organising committee and the legal entity involved. Kate is currently the only NZES rep on the committee. There is a need for more NZ representatives on the organising committee, and a NZ conference organiser. There will be pre and post workshops and field trips held in NZ. NZ sponsors will need to be found for the workshops and field trips. A NZ field trip co-ordinator will also be needed.

Kate sent a package of pamphlets on NZ biodiversity and NZ tourism video etc. to the recent Montreal Intecol conference.

Intecol will provide the seed money for the 2009 conference. It was agreed that NZES should seek legal advice on signing up to the organising structure.

Kate to forward information to John who will check with DOC solicitor

Kate to send PDF of the Intecol brochure to Jon to out on website. Copies will also be distributed at the NZES conference.

Discussion followed about the scientific position(s) on the organising committee.

Kate to talk to Australian Ecological Society to find out what type of person they want. Other Council members to provide ideas to Kate

John to organise meeting of interested NZES members at Nelson conference, to co-opt help with organising Intecol conference.

The Council congratulated Kate on the work she has done so far with co-ordinating NZES input into the organisation of this conference.

2. 2006 Joint Conference, Wellington
John reported that 500 people are expected. The Victoria University complex has been booked. Ben Reddiex and Paul Blaschke will assist. A conference booklet will be put on the website. Proposals for symposiums include:

- Multiple pest symposium
- Sub Antarctic Islands – Auckland Island – 150 year celebration
- Ecological restoration.

General Business

1. Nigel Barlow fellowship

There was a discussion about the Nigel Barlow $50,000 bequest for foreign students studying ecology at NZ Universities. NZES has been offered the fellowship

to manage and oversee. Options for the fellowship were discussed. It could be a one off fund for students or be managed as a trust with interest being used to fund students. The option of adding it to the Kauri fund was discussed but ruled out as it is specifically for foreign students.

John to provide options for Nigel Barlow fellowship to Mick Clout:

1. Provide top up funding for overseas students every second year ($4–5,000) or every year ($2–3000), or;
2. One off funding for 3 x students ($10,000 each), or;
3. Fellowship managed by another organisation, e.g. University.

2. Education

There was a short discussion about the education role of the Society. It was decided to ask members at AGM "what are your key priorities/issues for education?" The need for a Tuitime webmaster was discussed.

It was agreed that a specific education role is needed on Council. John and Shona to investigate co-opting NZES member for the education role on Council.

3. Media strategy

John reported that following e-mail support from Council members he has hired a media person for $400 to produce media releases from the Nelson conference. It was suggested that the Council hire the same person to produce media releases from each issue of the journal. There was general support for three stories per year.

It was also suggested that the media role could be included with the education role on Council. Ingrid also expressed interest in being the Council co-ordinator for media issues.

4. Meetings for next year

The location of Council meetings was discussed. It was decided that the venue should be reviewed and possibly rotated (e.g. Wellington, Hamilton, Christchurch) to reduce travel costs.

Next meeting:

18 November 2005 (Wellington, Turnbull House)

The meeting closed at 5.40pm

ECOLOGICAL SOCIETY E-MAIL LIST SERVER: DID YOU KNOW YOU AREN'T ON IT ANY MORE?

Well that got you reading. You may have been subscribed to the NZES listserver, but I have to do a lot of housekeeping on the list and have to remove about 2–3 addresses a month because they are generating error messages. These errors could be because people have moved and not changed their address; sometimes because they are over quota and the inbox is full (especially on hotmail-type accounts), and so forth.

So if you haven't had the odd email now and again (there is not a lot of traffic, about 1–2 messages a month perhaps) it might be worth checking if you are still on. You can do this by sending a new "subscribe" command, and if you are already on the list it will tell you so and do nothing else.

Also please note that if you send a message to the list itself for circulation, as sender you will get back in response the current list of error messages for all dead addresses I have not yet tidied up. Sorry these will come to you, but you can just delete them.

About the List Server

Now some background on the listserver (this summary below is also on the web pages)

What is a listserv?

A listserv (short for List Server) is a centralised list of e-mail addresses of subscribers. Anyone who is subscribed to the listserv will automatically receive all emails sent to the listserv, and can send emails 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 in New 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:

nzecosoc-request@it.canterbury.ac.nz

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 THESE INSTRUCTIONS AND FOLLOW THEM.

Sending list messages

To send a message to everybody on the list, use the address, nzecosoc@it.canterbury.ac.nz. 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 to send a message, send it to Dave Kelly (Dave.Kelly@canterbury.ac.nz) 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 people 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 one. If you changed address but forgot to tell the server, we start getting error messages from your old address and have to unsubscribe you manually, so make my life easier and do this yourself. If your email address has problems (e.g., 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 (Dave.Kelly@canterbury.ac.nz).

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(Effective from 30 August 2005)

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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 (newsletter@nzes.org.nz) 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:

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CHRISTCHURCH

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 (2005)

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

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