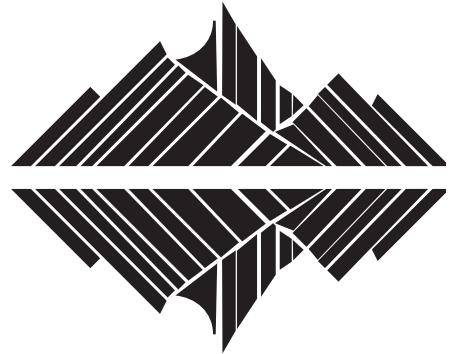


# Ecological Society

# Newsletter

No. 115, December 2005

Published by the New Zealand Ecological Society (Inc.),  
P.O. Box 25-178, Christchurch



## FROM THE EDITORS

Welcome to the final newsletter for 2005, we hope that your summer field work (or holiday) is off to a great start.

We are sad to note the passing of Dr David Given FLS. David was the 2005 recipient of the New Zealand Ecological Society Te Tohu Taiao Award for Ecological Excellence and was considered by many to be the 'Father of New Zealand plant conservation'. His many achievements are recorded in the 'Notable Achievements' column in Newsletter 114. David has left an enduring legacy through his pioneering efforts and commitment to plant conservation; he will be missed.

### New look newsletter 2006

We are pleased that a large number of people have chosen to receive their newsletter via e-mail. The advantage of receiving your newsletter electronically (apart from saving trees) is that you will receive your newsletter much quicker than the print edition. If you would like to receive your newsletter electronically please e-mail the secretariat [info@nzes.org.nz](mailto:info@nzes.org.nz). We have had some comments that the current format of the newsletter in columns is a little hard to read on a computer screen, with this in mind and the desire to continue to improve the newsletter we are looking for suggestions about changes to the format. Please send us your comments; things we specifically want feedback on are things you like or dislike about the current format, suggestions for changes, and suggestions for content such as pictures, columns, or topics for the 'Invited articles' or 'Ecological miscellany' sections. We hope to debut the new format in the first issue in 2006.

### Research funding debate

The recent debate in the Letters to the Editors on the Marsden Fund (Newsletters 113, 114 and current issue) has shown the depth of feeling ecologists have about our research funding systems. We are pleased to be providing a forum for ecologists to voice their opinions, and we feel that the relevant people are now aware

of the issues surrounding this topic so we are closing correspondence on this particular issue.

In relation to this the New Zealand Ecological Society apologises to Dr Andrew Pearce for publishing the letter from Barry Donovan in which he implied that Dr Pearce acted improperly in the allocation of funds by FRST during the recent OBI round. We would also like to emphasise that The Society in no way endorses or holds these views.

*Hannah Buckley and Ruth Guthrie  
Bio-Protection and Ecology Division*

*PO Box 84, Lincoln University*

*Phone: 03 325 2811*

*E-mail: [newsletter@nzes.org.nz](mailto:newsletter@nzes.org.nz)*



*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 .....  | 2  |
| Access to latest volumes of <i>NZ.J.Ecol.</i> .....                                     | 4  |
| Ecology across the Tasman 2006 .....  | 4  |
| Invited Articles .....  | 5  |
| News from the Ecological Society of Australia .....                                     | 7  |
| Ecology Stuck on the Web .....  | 7  |
| Fusionz .....   | 8  |
| Hotscience .....  | 9  |
| Meetings Diary .....  | 9  |
| Minutes of the 53rd AGM of the New Zealand Ecological Society .....                     | 10 |
| Ecological Society e-mail List Server:<br>Did you know you aren't on it any more? ..... | 12 |

## LETTERS TO THE EDITORS

### Reply to Don Smith (Manager of Marsden Fund): Is the Marsden Fund Currently Working in the Interests of New Zealand Science?

Both Professor Daugherty and Dr. Smith have provided responses to my earlier commentary. While I do not begin to agree with large portions of Professor Daugherty's response (particularly his views on the prevalence of molecular approaches in mainstream ecology), I do recognise that he has at least prepared his response in the spirit of constructive debate and discussion. However, the same cannot be said of portions of Dr. Smith's response. There are two instances in which I believe Dr. Smith has been misleading and these points cannot go unresponded.

Firstly, in my commentary, I suggested that the success rate of proposals with panellists as PIs in 2004 was probably over 50%. It could certainly not be much lower than that, as there were 9 panellists, each panellist can only submit one proposal as a Principal Investigator (PI), and some panellists did not submit proposals as PIs. Dr. Smith claims that my calculation was 'not correct'. However, his own calculation, claiming a success rate of 33%, is based on 9 proposals for which panellists were either PIs or Associate Investigators (AIs). At least some of these proposals would not have had a panellist as a PI (the two of the 9 that were Fast Start proposals for example). The use of a misleading comparison like that to claim that I am 'not correct' is egregious and hopefully accidental.

The other point I respond to is unfortunately not accidental. I deliberately worded my commentary in general terms rather than focus on specific instances. I certainly did not make any mention of my own previous applications to the Marsden Fund, successful or otherwise. Yet, in his response, Dr. Smith makes specific mention of a proposal of mine that was unsuccessful (end of third-to-last paragraph). This issue is in no way relevant to any of the points that I made in my commentary, and his motivation for doing this seems to have more to do with diminishing my credibility on a personal basis than in rebutting any of the points that I have made. My understanding is that information about unsuccessful submissions (be they job applications, manuscripts sent to journals, or applications to the Marsden Fund) are usually confidential. His release of what appears to be confidential information into the public arena, solely for the purpose of attacking the credibility of someone that does not agree with him, is unprofessional to say the least.

*David Wardle*

*Landcare Research, Lincoln, and Swedish University of Agricultural Sciences, Umeå, Sweden*

In his response to David Wardle's article "Is the Marsden Fund Currently Working in the Interests of New Zealand Ecology?" Charlie Daugherty mentions that "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". That person was me, and I did not seek reappointment for the following reasons, which I passed on to Don Smith (Manager, Research Funding, RSNZ), but which are given here as they may serve to highlight some of the systemic problems I perceive with the Marsden research evaluation process.

First, the initial proposals had a "development of research skills" section that was used in generating a ranking score but was in fact meaningless because at this stage the applicants do not have to identify funding levels, and the information can be altered when a full proposal is developed. Applicants can promise, for example, to include two post-docs and several PhD students, to get a higher score, but do not have to account for this at later stages.

Second, I was uncomfortable with having to consider proposals from co-panellists. I'm not suggesting that they behaved in any way improperly; rather that it was clearly an awkward situation for all those involved.

Third, I was not able to comment on proposals of numerous past/present collaborators/colleagues. This severely restricted the number of proposals that I could discuss at the panel meetings, and frequently resulted in me only being able to talk about proposals on topics outside my area of specialist interest. Given the composition of the panel at that time and particularly the dearth of other macro-ecologists on the panel, this often meant there was in fact little expertise available to assess some proposals.

Fourth, there seemed to be large disparities between proposals in the level of funding requested, and although funding levels were ignored until final stages of the assessment process, they did impact on the number of postgraduate opportunities available. It would be more helpful if a standard level of funding was applied to all proposals. Inter alia, the majority of funds go to support institutional overheads, which are also applied to post-docs, a practice that even FRST does not follow.

Finally, the whole process required an incredible time commitment of scientists when funds were available for pitifully few proposals (less than 10). While I think the twelve wise persons can rank the top 15-20% proposals, precision above this is an illusion.

*Bill Lee*

*Landcare Research  
Dunedin*

### Marsden Fund: not fair to anyone?

I was very interested in David Wardle's article on the Marsden Fund (Newsletter 113) and the replies by Don Smith of RSNZ and Charlie Daugherty, chair of the Ecology Evolution and Behaviour (EEB) panel (Newsletter 114). While I appreciate the willingness of Don and Charlie to debate the issues, I must say neither reply was wholly reassuring on the key points under discussion, which to me are how panellists are chosen, and how applications by panellists are dealt with.

Don's reply was helpful in that he has clearly done a lot of stats which mostly seem to show that there have not been any conclusive biases against ecology, towards panellists etc. My main concerns here are those any referee of such statements would make if they were in a journal article: what tests, what statistical power? Don says in various places that there was "no difference" among ecology and non-ecology applications in success rate, no difference in panellist success rate before vs during vs after panel membership, etc. However he does not give the means, and doesn't say what his sample sizes or methods of analysis were, so this may hide the fact that the means were skewed in the direction raised by David Wardle but the stats weren't powerful enough to show this as significant. In fact, my suspicions were raised by the claim that panellists are not apparently more successful after their term on the panel has finished. This may be true, but I think would be surprising. Surely panellists would know the system so much better after a term on the panel that they ought to write better applications. That Don's analysis seems to show no difference does seem a bit odd. My concerns about lack of statistical power are reinforced later on in Don's article when 28% or 33% is thought to be "within the range expected" from panellists who have "2 to 3 times" the average success rate. The average was given by Wardle as c 4%, so that apparently means 28-33% can't be separated from 8-12% but it's still 2.3 to 4 times higher. Not wholly reassuring.

This may seem like quibbling, but I think the underlying point is that with the present system, it is really hard to prove that there has not been something unfair going on inside the committee room, and even helpful analyses by Don find it hard to dispel this worry. Moreover, even if it was shown that the mean percent success rate was identical, that would still not dispel related worries about whether the best applications were funded. I shall return to these points below.

Don's second point is about why panellists can't be excluded from applying, but unless I missed something he argues mainly against excluding applications from Council members and panel chairs. Personally I can't see why panellists shouldn't be excluded from applying for the 3 years of their appointment (which need not be consecutive). Panellists could be asked onto the panel after they have just got grants, after all.

Charlie addresses the question of skewing of panel expertise towards molecular areas, but in my opinion not very convincingly. He argues that molecular techniques are increasingly important in ecology – true, but in my experience not anything like as important as this area's current representation on the panel. One thing that could be done, but has not been yet, would be to compare the balance of expertise among panellists, with the balance of subject areas among applications considered by the panel. Another possible analysis would be the representations of journals listed in the CVs of panel members, versus the representation of journals cited in the reference lists for the applications. I would be surprised if these did not show that in 2005 a predominantly molecular panel was considering a predominantly non-molecular pile of applications. Next, Charlie seems to misunderstand David Wardle's point about panellists not publishing in mainstream ecological journals. Finally he argues that terrestrial ecology is better represented on the panel than sub-specialities like extremophile biology, which does not seem great grounds for reassurance.

Perhaps I could lay out what I think are the serious questions about the Marsden system, which to my view have not been satisfactorily answered yet.

Firstly the process of selection of panellists is opaque and the results have been unsatisfactory in terms of demonstrated balance among subject areas. As far as I can tell, the panel chair recommends his/her mates, and the Marsden Council approves this. There is no way of knowing when panellists are approached, who is considered, or what grounds are used to select people.

Charlie says that he considers the disciplinary balance of the panel to be important. The exact issue that worries me, and I suspect other NZES members, is that this expression of good faith has not been matched by any visible progress. In early 2004, NZES council was so concerned about the makeup of the then EEB panel that it wrote to Don Smith complaining about this. (Memorably, at that time the proposed Ecology Evolution and Behaviour panel contained not one person who was then a member of the NZ Ecological Society, which might be thought to say something about their areas of interest.) The result was that Bill Lee of Landcare, a terrestrial ecologist, was appointed to the panel. Bill stood down after one year (I'm not sure why) and the acid test has to be whether Charlie, Don, and the Marsden Council learned anything from the skewed panel that led to that 2004 fuss when selecting replacements for the 2005 panel. As far as I can see, they did not, and the panel is if anything worse in 2005 than in 2004 for balance across disciplines. So exactly what is going on here, and how does the general public get to see any change or improvement?

Note that one worry about the makeup of the panel is that ecology applications get less funding; Don's

article claims that has not been the case. It is much less easy to test for the other worry that could follow a skewed panel representation – that ecology applications are poorly understood, and the ones funded are not necessarily the best ones. It is almost impossible to tell if panellists did a good job in evaluating applications outside their areas of specialist expertise, or whether the “lottery” element Barry Donovan refers to applied more strongly there. Surely this is a good reason for having a demonstrable balance on the panel that matches the average out there for ecology, evolution and behaviour (and the EEB applications in particular).

The second key question is of panellists applying while on the panel. The point that neither Don nor Charlie seem to grasp is that it will always be impossible to convince folk that there was no unfair advantage. It will always look suspicious.

So what do I think the Marsden Council should do? Firstly they should introduce a transparent process of calling for applications for panel members (for example, NZ Ecological Society has never been asked for any suggested names). Then when the selection is announced there should be an explicit analysis of the subject areas of the full panel, compared to a moving average of recent application subject areas in the relevant panel. This would remove the perception that at present the main qualification for going onto the panel is that you are a mate of, or at least known to, the current chair, a process that will always be likely to result in a concentration of expertise into a subset of the subject area.

Secondly panellists should not be allowed to apply while they serve on the panel. Full stop.

Note that I am not saying that any panel member or chairman has willingly tried to stack the panel, or has benefited financially by getting a grant that was less worthy than others that were rejected. I’m also not saying that they have not, because I simply can’t know. I’m saying the current processes make it impossible for anyone outside to know whether either of these things are going on. It may be, I would venture to say probably is, that the panellists have all done a heroic job of setting their own interests to one side. The system stinks in that nobody outside can be sure of this, and so probably-honest panel chairs and panellists are bound to take a lot of stick for things they might not have done. This is patently unfair to panellists as well as to the scientific community, and is the major reason the Marsden Council should reform the system without delay.

*Prof. Dave Kelly  
Plant ecology  
University of Canterbury  
28 November, 2005*

*These views are correspondent’s own, and are not those of the New Zealand Ecological Society.*

## ACCESS TO LATEST VOLUMES OF NZ.J.ECOL.

Access to the latest three years of the *NZ Journal of Ecology* online will be password protected before the end of 2005. This will include all the juicy in-press articles that are now going online before they are printed. On the address label of your newsletter (or at the top of your email if you get your newsletter by email) you should find a username and a password. This is your unique member username and password. Please don’t lose it.

Once the password protection system is activated on our journal website ([www.nzes.org.nz/nzje/](http://www.nzes.org.nz/nzje/)), you will need to enter this username and password to view the PDF files of articles published within the last three years. All older volumes will remain free for anyone to access and everyone will have access to volume contents and abstracts.

If you are lucky enough to work at an institution that subscribes to the society, computers on your work network should let you straight in to the journal PDF files without a password. If they do not, please ask your IT person or library person to send me the IP address or addresses.

At this stage in the evolution of our website, you are stuck with the username and password we give you. But if you’re extra good, I may get around to putting a membership page online where you can make a more memorable username and change your password to the name of your favourite pet. By then, some of you may have already planned ahead and purchased a couple of new pets to name after your username and password. Or perhaps not.

*Jon Sullivan  
Lincoln University  
[webmaster@nzes.org.nz](mailto:webmaster@nzes.org.nz)*

## ECOLOGY ACROSS THE TASMAN 2006

**A joint conference of the New Zealand Ecological Society and the Ecological Society of Australia**

*Dates: Sunday 27 August – Friday 1 September 2006*

*Venue: Kelburn Campus, Victoria University of Wellington*

*Science programme:* We anticipate a strong scientific programme. Both theoretical and applied ecological papers are welcome. Symposium topics will be determined by the delegates, so this is your opportunity to drive the direction of the conference. Call for papers: 15 February 2006.

*Social events:* There will be an exciting opening function

on the Sunday, including a kapa haka performance. The conference dinner is to be held at the Westpac Trust Stadium, with stunning night-time views over the sports field.

*Fieldtrips:* Wellington has many interesting destinations for short field trips. Full and half-day guided trips are being planned in and around Wellington.

*Student day:* Sunday 27 August. Prior to the main conference, there will be a student day, organised by students for students.

*For further information, visit the website, which will be updated regularly, or contact the conference organiser: [ce-conferences@vuw.ac.nz](mailto:ce-conferences@vuw.ac.nz).*

## INVITED ARTICLES

### Food for thought: Revisiting the topic of moa feeding ecology

Jamie Wood

In the 1930s a horse died on a farm in North Canterbury. The farmer and his son, upon burying the horse in a swamp, discovered three large bones which, in 1938, made their way to the Canterbury Museum. They were bones of the giant moa (*Dinornis robustus*), and excavations at that swamp site in Pyramid Valley over the following thirty years would revolutionise the understanding of New Zealand's prehuman avifauna, and provide the first direct evidence of moa feeding ecology, in the preserved content of moa gizzards.

In the early days moa were regarded largely as grassland birds, which may have ventured into a forest understorey when certain berries were in season. In his book on moa, Buick (1931) wrote "Its food was mainly, if not exclusively, vegetable. It browsed upon the hillside grasses as the cattle do, and devoured leaves and berries when it could reach them." It was therefore quite a revelation when the moa gizzard remains excavated from Pyramid Valley swamp were found not to be full of grasses, but material from woody trees and shrubs. The content of 11 individual moa gizzards excavated from Pyramid Valley, as well as three obtained with moa bones from Scaife's Lagoon, near Wanaka, Central Otago, were examined in great detail by Burrows *et al.* (1981).

The work of Burrows *et al.* (1981) was very important in changing the way ecologists thought about the influence moa had on plant evolution, and in the functioning of prehuman New Zealand ecosystems. Severed ends of twigs indicated that moa had simply snapped them from the tree using sharp beaks and powerful jaw muscles. Subsequent ideas on the topics of moa feeding ecology and herbivory impacts on New Zealand's plants and ecosystems were discussed in detail in the supplement to *New Zealand Journal of Ecology*, vol. 12, 1989, entitled "Moas, mammals and

climate in the ecological history of New Zealand". Identified in this volume were a range of growth habits seen in New Zealand plants that may have evolved as a result of moa browsing pressure. These included divarication (originally put forward by Greenwood & Atkinson 1977), heteroblasty, spines, camouflage, mimicry (Atkinson & Greenwood 1989), deciduousness and poisons (Batcheler 1989).

All of the gizzard content samples examined by Burrows *et al.* (1981) were probably from the same moa species, *Dinornis robustus*. Six genera and 10 species of moa are currently recognised in the prehuman fauna of New Zealand. The variation in beak size and structure between genera is significant; for example, the relatively broad rounded beak of the stout-legged moa (*Euryapteryx geranoides*) compared to the thick, heavy, pointed beak of the little bush moa (*Anomalopteryx didiformis*). Such differences suggest feeding ecology, in addition to geography, was a major factor in the niche separation of moa species, and this was recognised by researchers at an early stage. Since the 1989 *NZ J. Ecol.* supplement however, little advancement has been made on the topic of moa herbivory. This is largely due to the fact that direct evidence of moa diet does not preserve well in subfossil deposits, and as a result is rarely encountered and collected.

The two main forms of diet evidence are, as already mentioned, preserved gizzard contents (discrete piles of plant material found associated with moa skeletons), and coprolites (dried droppings). Until relatively recently moa coprolites had been rare items, with perhaps less than a total of two dozen held in the collections of New Zealand museums. These coprolites were therefore not subjected to destructive analysis. As a result of this, combined with the fact that plant material in coprolites is difficult to identify, being much finer and more digested than gizzard contents, the first in depth look at moa coprolites was presented by Horrocks *et al.* just last year (2004). They analysed the content of coprolites from Takahē Valley, Fiordland, attributed to the upland moa (*Megalapteryx didinus*), and found that this moa species had a varied diet, browsing both twigs from forest trees (mostly *Nothofagus*) and the leaves of herbs growing amongst the basin floor grasslands.

Since this study was published, the discovery of relatively large amounts of moa coprolites beneath rock overhangs in Central and western Otago has allowed further study of moa diet using coprolites to proceed. Research currently being undertaken at Otago University with the Otago Museum is examining the diet of moa species in the two very different Holocene environments, the high rainfall, forest setting of the upper Dart River Valley, and the semi-arid open woodland of the Cromwell Gorge. Recent advancements in ancient DNA techniques means that the moa species which

deposited an individual coprolite can be identified, allowing the current study to examine both interspecific differences in diet within a habitat, and intraspecific differences between different habitats.

Studies like this one will allow a greater understanding of how the range of moa species influenced New Zealand's prehuman ecology. What was the vegetation here actually like with these large avian herbivores roaming the landscape. Recently discovered moa gizzard material from Central Otago show that some moa species could clip and devour twigs up to 15mm in diameter, their woody diet making them unlike any other type of bird. It has been suggested before that the impacts of moa may not have been too different to the impacts of introduced browsing mammals (Burrows *et al.* 1981). This being the case, it is likely that a flush of growth in the forest understories and shrublands followed their extinction. The understories of the forests that greeted the first Europeans to these shores may have been much denser than their prehuman state. Therefore, are our impressions of natural, dense stands of woody vegetation based on an un-natural situation? If so, then does vegetation where low densities of mammalian browsers more closely resemble how the New Zealand bush was before humans arrived?

Understanding moa feeding ecology will also allow a greater understanding of why plants evolved different growth habits. For example, explanations put forward for divarication include increased springiness in response to pulling by moa, and reduced accessibility to fruits and leaf material. However, given that moa would have no trouble snipping through the branches of a divaricating shrub, and the fact that woody material was probably the major part of a moa's diet, it would seem more likely that this growth habit has evolved to give structural support to a tree which has had to evolve thin branches in an effort to deter moa from feeding on it. One can imagine if a moa is feeding on wood, then the ideal situation for a plant would be to have branches as thin as possible, so that a moa would have to feed for longer and longer periods to ingest the same volume of food, eventually making a plant species unprofitable to feed on. Such thin branches in a normal growth habit would have reduced structural strength and would droop and sprawl across the ground. Therefore the tangled nature of the branches gives the tree support and allows it to remain upright where it can access sunlight. Or perhaps masting in beech (*Nothofagus*) trees evolved to oversaturate the moa population with seedlings, ensuring that some survived to grow above a browsable height.

The importance of moa feeding ecology in understanding the ecological history of New Zealand means that, as a topic for research and debate, it is far from extinct!

## References

- Atkinson, I.A.E. & Greenwood, R.M. 1989. *NZ J. Ecol.* 12 supplement, 67–96.  
 Batcheler, C.L. 1989. *NZ J. Ecol.* 12 supplement, 57–66.  
 Buick, T.L. 1931. *The mystery of the moa*. Thomas Avery & Sons Ltd., New Plymouth. 357p.  
 Burrows, C.J. et al. 1981. *Rec. Cant. Mus.* 9(6), 309–336.  
 Greenwood, R.M. & Atkinson, I.A.E. 1977. *NZ J. Ecol. Proc.* 24, 21–33.  
 Horrocks, M. et al. 2004. *Emu* 104, 149–156.



A selection of clipped twigs from moa gizzard content, Cairnmuir Gully, Cromwell Gorge, Central Otago. Scale bar is cm.



A selection of stones from a single gizzard of *Pachyornis elephantopus*, Styx Valley, Central Otago. Scale bar is cm.

Jamie Wood is a PhD student working in the Geology Department at Otago University. His thesis is 'Post-glacial ecosystems of the dryland basins of Central Otago' supervised by Daphne Lee and Dave Craw of the geology department and Susan Walker from Landcare Research. Jamie presented this research at the recent NZES/ FSS conference in Nelson.

## NEWS FROM THE ECOLOGICAL SOCIETY OF AUSTRALIA

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

November/December 2005

Hi everyone, this will be a brief report due to the hectic pre-conference running around experienced by all us ESA 2005 conference goers. We are also excited about the two upcoming joint conferences with NZES firstly in Wellington (my home town) next year, and then INTERCOL in Brisbane in 2009.

Firstly, for all you myrmecologists: Don Driscoll and lab (Flinders University, South Australia) have been having some trouble with ants, particularly large meat ants (*Iridomyrmex purpureus*) in pit fall traps. The ants set up foraging columns and carry off captured animals. Surface insecticide was partially successful and Teflon in a liquid suspension has prevented some foraging columns, although that isn't so effective for meat ants. The next step is to try an insecticidal dusting powder. If any NZES members have any experience with preventing ants from foraging in pitfalls or any ideas about this, please contact Don at [Don.Driscoll@flinders.edu.au](mailto:Don.Driscoll@flinders.edu.au).

Some of you may know the Corroboree frog, *Pseudophryne pengilleyi*, an endemic frog which migrates between subalpine snow-gum woodlands and sphagnum bog habitats in alpine NSW/ACT (Australian Capital Territory). Two years ago the ACT government began a captive breeding program for the frogs which has been very successful, over 1000 frogs are currently in the captive colony. This is estimated to be more than the total number in the wild. The frogs are due to be released in late 2006/early 2007, and will be monitored to determine the programs success.

The Australian Bird Study Association will hold its AGM and Science day on Saturday 25 March 2006 in Canberra. The theme of the Science day is "Raptors - Nocturnal and Diurnal". Visitors from NZ who are in or close to Canberra late March would be welcomed, details will be advertised on the Association's web page ([www.absa.asn.au/](http://www.absa.asn.au/)) closer to the time. For more details contact Dr A.O. Nicholls [nick.nicholls@csiro.au](mailto:nick.nicholls@csiro.au).

The ESA produces two peer-reviewed journals, Austral Ecology (8 volumes per year) and Ecological Management and Restoration (3 volumes per year). Austral Ecology needs no introduction as the older and more well known of the society's journals. Topics covered include ecological and theoretical studies in terrestrial, marine and freshwater systems in all areas of the southern hemisphere. The newer addition to the AES journal family is Ecological Management and Restoration (EMR) which has the goal of bridging the

gap between ecologists and practitioners. EMR is innovative in that it addresses the need among landholders for information about the science and practice of ecosystem restoration and management. In December's edition there are papers from such diverse topics as freshwater protected areas, fertility control in Koalas, effects of paddock tree loss on cockatoos and recovery of eroding peat surfaces. There is an upcoming special volume on vegetation condition assessment, so keep an eye on the journal contents.

Once more that's the end of this edition. More details of the ESA, its journals and its members can be found on our website, [www.ecolsoc.org.au](http://www.ecolsoc.org.au) or by emailing me on [rsinclair@bio.mq.edu.au](mailto:rsinclair@bio.mq.edu.au). Cheers!

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](http://www.ecolsoc.org.au/What%20we%20do/Prizes/documents/RobynSinclairPoster.pdf)

## ECOLOGY STUCK ON THE WEB

### 4: Photo sharing the Flickr way

In my first Ecology Stuck on the Web, I briefly introduced the wonders of using images.google.com to make plant species look like more than Latin binomials and Flora jargon. Type in a species name and Google will instantly scour the web to show you available photos of your species. (Disclaimer disclaimer disclaimer: check out the credentials of the source website before trusting a species identification on the web.)

With photo search engines like images.google.com, we could all bounce along being happy parasites sucking off other people's hard work. We could keep our own digital photos and scans safely locked away in our hard drives and intranets, too mind-bogglingly bamboozled by how we might put them onto a website to share them with others.

But be bamboozled no longer, my friends! There is now an easy and elegant and, gasp, \*free\*, way to share your photos with the world, and its name is Flickr ([www.flickr.com](http://www.flickr.com)). To quote their website, "Flickr is the WD-40 that makes it easy to get photos from one person to another in whatever way they want."

Like the Google Scholar service I introduced last issue, Flickr is a project in development that is online in Beta form. But that's OK because it works spectacularly well already. And Flickr is no basement hobby project thrown together by a couple of Canadians. It is already being used by over a million people, contains almost 40 million photos, and was recently acquired by Yahoo (and it was developed by a couple of really clever Canadians and their small company).

Flickr is fantastic for all sorts of reasons. It is more than easy, elegant, and free. It allows you (and your friends) to attach and edit keywords (called “tags”) to photos. These tags are all searchable. You can add public comments to other people’s photos (gushing about how cute a particular baby furry animal is or providing a latin binomial for said furry animal). You can join and create groups to accumulate photos on a certain topic (e.g., [www.flickr.com/groups/canterburynature/](http://www.flickr.com/groups/canterburynature/)). And you can make your Flickr photos show up on your Blog. (A blog is short for a weblog) a good example of an effective blog is frogblog, at [blog.greens.org.nz/](http://blog.greens.org.nz/).)

Signing up for a free account at Flickr allows you to upload up to 20 MB of photos each month to the Flickr website. You can download a snazzy piece of software from Flickr (also for free) that allows you to resize and label photos and upload them to the Flickr website. Really simply. For 20 MB, you can load about 30 of your favourite pictures onto Flickr (or more if you really shrink them). The three major photo formats (JPG, PNG, and GIF) are all cheerfully accepted. (And for those readers younger than me, note that you can also apparently upload photos and browse Flickr photos with your fancy pants camera cellphone.)

Your photos end up being displayed on a Flickr webpage of your own, where your latest 200 photos will be displayed (you can see mine at [www.flickr.com/photos/mollivan\\_jon/](http://www.flickr.com/photos/mollivan_jon/)). If you’ve loaded up more than 200 photos, the old ones will still show up in searches and on group pages, they just won’t be displayed on your Flickr webpage. You can also organise your photos in up to three albums (“sets”). Flickr commits to storing your photos forever at a maximum size of 1024 pixels across (pretty big). If you choose to cough up US\$25 a year, Flickr will store all photos at their original size up to 10 MB each, as well as allows you to upload 1GB of photos a month, display all your photos ever (without ads), and make as many sets as you like. And yes, Flickr says there will always be a free service.

But what if people, complete strangers at that, run off and use your photos? Gasp! Well, that’s really the whole point. But if you want to restrict access to your Flickr photos, you can. You can restrict access to everyone but yourself and go on being a happy parasite. You can also restrict access to just a specified group of Flickr users. Also, uploaded photos are copyright to you by default meaning that nobody can legally use your photos without first gaining your permission.

But hey, this is supposed to be about sharing. What you can also do with your Flickr images is assign one of several Creative Commons licenses ([creativecommons.org](http://creativecommons.org)). All my uploaded photos are set to license number 2. This allows people to “copy, distribute, display, and perform the work” and “to make derivative works” so long as my name is always given and the use is non-

commercial. Any commercial use of my photos still legally requires my prior permission.

One of the neat ways of sharing and collating photos is through Flickr’s Groups. For example, there is a “New Zealand Natives” group ([www.flickr.com/groups/nznatives/](http://www.flickr.com/groups/nznatives/)) and now a “New Zealand Naturalised” group ([www.flickr.com/groups/nznaturalised/](http://www.flickr.com/groups/nznaturalised/)) for photos of wild species in New Zealand. Anyone can join these groups and add their photos to them. Anyone at all can browse these photos and use them (copyright dependent). There are lots of groups available, including more useful subjects like “Doom Penguins” (photographic evidence that “penguins are the rulers of the Earth”) and “Creepy Rabbits” (photos supporting the proposition that “rabbits can be creepy”).

All these features (and many more) make Flickr a great new way of sharing your digital photos and scans with the world. Flickr tags also make for a more targeted and reliable way of finding photos of a particular subject (e.g., species) than Google. Flickr is just beginning to fill with New Zealand ecology photos but the potential is enormous. Go forth and flickr!

Jon Sullivan  
Lincoln University  
[webmaster@nz.es.org.nz](mailto:webmaster@nz.es.org.nz)

## FUSIONZ

The Royal Society of New Zealand has launched its job search service, Fusionz (<http://fusionz.rsnz.org>). Fusionz advertises positions in science and technology organisations or for scientific/ technical jobs within other organisations, across New Zealand.

For job seekers: The past two months have seen adverts from a wide variety of organisations—five of New Zealand’s eight universities, eight of the nine Crown Research Institutes and several private research institutes, public companies and government agencies. See <http://fusionz.rsnz.org/> to browse all listings or search for jobs within a specific geographical or scientific area.

For job advertisers: With 363 Fellows, 1500+ members, 3000 subscribers to our weekly newsletter (which includes updates and the week’s new job listings), and 20,000 scientists and technologists represented by our 60 constituent organisations, the Royal Society offers targeted marketing of your job vacancies. Advertising jobs is easy—simply click on ‘Add a job’ and fill in the details—the vacancy is posted up immediately. The cost is \$50 per advert but we will be happy to offer a discounted flat rate that allows organisations to post up as many vacancies as they have for a set period (contact: [nisha.basson@rsnz.org](mailto:nisha.basson@rsnz.org)).

## HOTSCIENCE

Efford, M.G., Warburton, B., Coleman, M. C. and Barker R. J. 2005. A field test of two methods for density estimation. *Wildlife Society Bulletin* 33: 731–738.

Population density estimation with a new spatially explicit capture–recapture method was tested in the field and compared to distance analysis of data from trapping webs. Brushtail possums were trapped in pine forest at Waitarere, near Foxton. Capture–recapture with hollow trapping squares gave an estimate (1.9/ha) that was close to the result from nearly complete removal (2.3/ha). Trapping webs gave highly biased estimates (6.5–8.0/ha), consistent with Monte Carlo simulations. The spatially explicit capture–recapture method places few constraints on the spatial configuration of sampling; dispersed configurations (e.g. randomly sited trap clusters) may be used to estimate mean density across landscapes. See [www.landcareresearch.co.nz/services/software/density](http://www.landcareresearch.co.nz/services/software/density) for software and a pdf of the paper.

## MINUTES OF THE 53RD AGM OF THE NEW ZEALAND ECOLOGICAL SOCIETY

Held on 30 August 2005 at Rutherford Hotel, Nelson (during annual conference)

The AGM opened at 4.30pm.

### Present

John Sawyer (chair), Shona Myers (secretary), and 42 other members (see list below)

### Apologies

Neil Deans, Dave Kelly

### Minutes of the 52nd AGM

Move they be accepted as a true record: John Sawyer, seconded Alison Evans, carried.

### Matters arising

The motion from the last AGM requesting that the NZ representatives of IUCN be asked to report back to the Society was discussed. John Sawyer reported that he has talked to the NZ IUCN Committee and expressed NZES concerns about the relevance of the IUCN, and the lack of information provided on the usefulness and results of IUCN. A NZ subcommittee has been set up and John has requested to be on that committee. The Committee will communicate better with NZES.

### Annual reports

John Sawyer spoke to his annual report, which was printed in the last newsletter (113). The NZES has had a good year, with future joint conferences planned with the Ecological Society of Australia in Wellington in 2006 and INTECOL in 2009. The NZES Council is

aiming to improve the transfer of ecology to a wider audience. John challenged all ecologists to do this. The certification process for ecologists has been established through the Environmental Institute of Australia and New Zealand ([www.eianz.org](http://www.eianz.org)), and John urged NZ ecologists to seek professional certification. John thanked council members including the newsletter editors for their work during the year.

Rachel Keedwell spoke to her Treasurer's report and reported that the council has a healthy net surplus, with the 2004 Invercargill Conference returning a good profit. Rachel discussed options for using the Societies surplus, including actively adding to the Kauri Fund. She explained that Council has recommended adding \$10,000 plus interest payments from term deposits to the Kauri Fund.

The high subscription cost was questioned. Rachel explained that this would be due to the 2004 and 2005 IUCN subs both being paid 2005.

Peter Williams and Judith Roper-Lindsay suggested putting the cheque account into an interest bearing account. Rachel will investigate this.

Murray Williams questioned the high cost of the journal and compared it to the costs of producing *No-tornis*. John noted this and explained that changing the format to reduce costs is being investigated.

Carol West noted the increased council expenditure and suggested shifting the location of meetings closer to council members. John explained that Council has discussed and will be reorganising location of meetings to reduce travel costs.

John moved a vote of thanks to Rachel.

Moved that the Treasurer's report be accepted Rachel Keedwell, seconded Susan Timmins, carried.

Jon Sullivan spoke to his webmasters report. He reported that NZ Ecology on line was launched last conference with all back issues of the journal now on line. Website use is now three times more than before, with 70% use from within NZ, and 50,000 different computers having visited the site. Issues in press are now put straight onto the web. *NZ Entomologist* is now on line and will have a joint search engine with NZES. PDFs of the Conference talks will also be on line.

Mel Galbraith questioned the free access to all journal articles on line and whether this may result in loss of subscribers. A discussion on this followed. Debra Wotten explained that it would be a pity to lose institutional subscribers. Rachel noted that we do not want to wait until subscriptions go down. John explained that Council is monitoring the situation and will instigate a 3-year gap where only members have on line access.

Karen Denyer asked if the production of electronic versions only of journals had been investigated. John explained that Council has discussed this. Many sub-

scribers still want to receive a hardcopy of the journal. Mel noted that downloading electronic versions of articles can be a problem for students. Subscribers now have an electronic option for newsletter. Shona noted that this has been taken up by approx. 50% of subscribers.

A vote of thanks was given to Jon for his work on the website.

### **Election of Officers**

Nominations for President: Susan Timmins nominated John Sawyer, seconded Rachel Keedwell. There were no further nominations. John was declared elected.

Nominations for Vice President: Murray Williams nominated Susan Timmins, seconded Peter Williams. There were no further nominations. Susan was declared elected.

Nominations for Secretary: Susan nominated Shona Myers, seconded Judith Roper-Lindsay. There were no further nominations. Shona was declared elected.

Nominations for Treasurer: Carol West nominated Rachel Keedwell, seconded Ruth Guthrie. There were no further nominations. Rachel was declared elected.

Councillors: two positions were vacant due to Kate McNutt finishing her two-year term and Dave Kelly not standing for re-election. Alison Evans and Ingrid Gruner are half way through their two-year terms.

Nominations for councillors:

Susan nominated Kate McNutt, seconded Carol West

Alison Evans nominated Madam Guatam, seconded Cathy Jones

Alison Evans nominated Laura Young, seconded Jenny Hurst

Shona Myers nominated Mel Galbraith, seconded Ingrid Gruner

An election was conducted and the following two councillors were declared elected: Kate McNutt and Mel Galbraith.

### **General Business**

Carol West recommended an auction to raise money for the Kauri Fund at the joint conference in Wellington.

There was a discussion about the education role of the Society. John Sawyer announced that NZES Council is co-opting Karen Denyer to further develop this part of the Council's role. There is a need to deliver ecology to a wider audience and fulfil both aims of the society. A professional media company is also being contracted to generate publicity from the conference and from the journal.

He asked members to provide ideas on key priorities for education. Suggestions from members at the AGM included the following:

- Science columns in newspapers and magazines, e.g. North and South

- Posters
- Calendars
- Seminar presentations
- Factsheets
- NZ Ecology/Natural History book

Karen Denyer noted that it is important to determine who the audience is.

There was discussion about the need for ecological research to be used at the political and management level. There was general agreement that decision makers are an important audience to target. Judith agreed that there needed to be a better science in decision making. Susan suggested that providing the technical know how could be the niche market for the society.

John noted that funding will be sought through TFBIS for factsheets on NZ ecology (e.g. 1080). The potential for differences in ecological opinions on key issues was discussed.

Owen Spearpoint mentioned that there is a lot of interest in information on restoration.

Mary McIntyre mentioned the poster that was produced by the Society. John noted that Ruth and Jon are designing a poster to advertise the journal.

The Encyclopaedia of NZ was discussed as a possibility for items on ecology.

John Innes suggested the need to write the book on NZ ecology with information, case studies etc from society ecologists. An update of Natural History of NZ was also suggested.

The next Conference was announced as being joint with Australian Ecological Society in Wellington, August 2006.

John Sawyer moved a vote of thanks to the secretary Shona Myers and to Alison Evans for the work involved in organising the conference awards. Susan Timmins moved a vote of thanks to John Sawyer.

The meeting closed at 5.50 pm.

### **Present at 53rd AGM**

#### *Members:*

Chris Bycroft, Jim Campbell, Bill Chisholm, Bev Clarkson, Nicola Day, Karen Denyer, Brendan Doody, Alison Evans, Mel Galbraith, Hazel Gatehouse, Madan Gautam, Richard Gillies, Claire Graeme, Ronny Groenteman, Philip Grove, Ingrid Gruner, Ruth Guthrie, Rod Hitchmough, Jenny Hurst, Melissa Hutchison, Clayson Howell, John Innes, Cathy Jones, Rachel Keedwell, Jenny Lux, Tim Martin, Mary McIntyre, Bruce McKinley, Kate McNutt, Laura Molles, Colin O'Donnell, Michal Sarfati, Owen Spearpoint, Cielle Stephens, John Sullivan, Susan Timmins, Christina Troup, Claudine Tyrell, Peter Williams, Jamie Wood, Debra Wotten, Laura Young.

## New Zealand Ecological Society Council contacts 2005/2006

(Effective from September 2005)

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

**Secretariat (society office – Noreen Rhodes and Sue Sheppard)**  
NZ Ecological Society  
PO Box 25-178, Christchurch  
Tel/Fax 03 960 2432  
[nzecosoc@paradise.net.nz](mailto:nzecosoc@paradise.net.nz)

### President

**John Sawyer**  
Department of Conservation  
P.O. Box 5086  
Wellington  
Tel (wk): 04 472 5821  
Fax: 04 499 0077  
[jsawyer@doc.govt.nz](mailto:jsawyer@doc.govt.nz)

### Vice President

**Susan Timmins**  
Department of Conservation  
PO Box 10-420  
Wellington  
Tel (wk): 04 471 3234  
Fax (wk): 04 471 3279  
[stimmins@doc.govt.nz](mailto:stimmins@doc.govt.nz)

### Secretary

**Shona Myers**  
Auckland Regional Council  
Private Bag 92012  
Auckland  
Tel 09 366 2000 ex 8233  
Fax 09 366 2155  
[shona.myers@arc.govt.nz](mailto:shona.myers@arc.govt.nz)

### Treasurer

**Rachel Keedwell**  
24 Buick Crescent  
PO Box 5539  
Palmerston North  
Tel 06 356 5519  
Fax 06 356 4723  
[rachel.keedwell@xtra.co.nz](mailto:rachel.keedwell@xtra.co.nz)

### Councillors (4)

**Alison Evans**  
DOC Canterbury,  
Private Bag 4715,  
Christchurch.  
Tel 03 3799 758  
Fax 365 1388  
[amevans@doc.govt.nz](mailto:amevans@doc.govt.nz)

### Kate McNutt

Environmental Scientist  
PO Box 364  
Whakatane  
Tel 0800 368 288 x9436  
Fax 0800 368 329  
[kate@envbop.govt.nz](mailto:kate@envbop.govt.nz)

### Ingrid Gruner

Department of Conservation  
West Coast Tai Poutini Conservancy  
Private Bag 701  
Hokitika  
Tel 03 7555536  
[igruner@doc.govt.nz](mailto:igruner@doc.govt.nz)

### Mel Galbraith

School of Natural Sciences  
Unitec New Zealand  
Private Bag 92025  
Carrington Road, Mt Albert  
Auckland  
Tel 09 849 4180  
[mgalbraith.unitec.ac.nz](mailto:mgalbraith.unitec.ac.nz)

### Co-opted Councillor (Education/Advocacy)

**Karen Denyer**  
Environment Waikato  
PO Box 4010  
Hamilton East  
Tel 07 859 0999  
[Karen.Denyer@ew.govt.nz](mailto:Karen.Denyer@ew.govt.nz)

### Journal scientific editors

**Duane Peltzer**  
Landcare Research, PO Box 69,  
Lincoln  
Tel 03 325 6701 ext 2252  
Fax 325 2418  
[peltzerd@landcareresearch.co.nz](mailto:peltzerd@landcareresearch.co.nz)

Together with (from 14 December 2005)

### Peter Bellingham

Landcare Research, PO Box 69,  
Lincoln  
Tel 03 325 6701  
Fax 325 2418  
[bellinghamp@landcareresearch.co.nz](mailto:bellinghamp@landcareresearch.co.nz)

### Journal technical editor

**Roger Dungan**  
School of Biological Sciences  
University of Canterbury  
Private Bag 4800, Christchurch  
[Roger.Dungan@canterbury.ac.nz](mailto:Roger.Dungan@canterbury.ac.nz)

### Newsletter editors

**Ruth Guthrie and Hannah Buckley**  
Bio-Protection & Ecology Division  
PO Box 84  
Lincoln University  
Tel 03 325-2811,  
Fax 03 325-3844  
[newsletter@nzes.org.nz](mailto:newsletter@nzes.org.nz)

### Webmaster

**Jon Sullivan**  
Bio-Protection & Ecology Division  
PO Box 84  
Lincoln University  
Tel 03 325-2811,  
Fax 03 325-3844,  
[sullivaj@lincoln.ac.nz](mailto:sullivaj@lincoln.ac.nz)  
[webmaster@nzes.org.nz](mailto:webmaster@nzes.org.nz)

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](mailto: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:

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

**Next deadline for the newsletter is 20 February 2006.**

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

**This issue is printed on 100% recycled paper**

