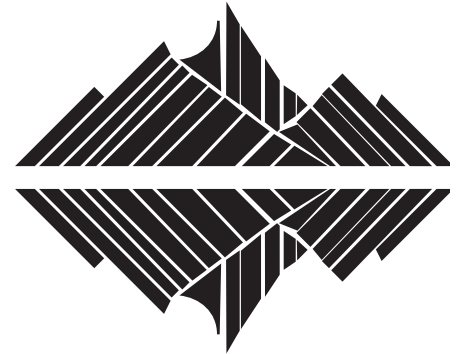


# Ecological Society Newsletter

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## FROM THE EDITORS

We are pleased to announce that the newsletter will soon be entirely electronic. If you don't already receive it by email, the Secretariat will contact you for your preferred email address. From now on, you will receive an email containing the link to a pdf of the newsletter. You will also be able to access the newsletter from the society's website.

The joint Conference with the Ecological Society of Australia, 'Ecology across the Tasman' last month was enormously successful. We enjoyed the great variety of talks, and the well-planned and smoothly running events. Thanks to the conference organising committee—you did a fantastic job. In particular we were very impressed with the large turnout of people from both countries and the high proportion of students from a range of universities. The standard of talks was very high; and there were over 100 student talks—which we're sure made judging interesting but difficult. Congratulations to all winners of student awards. We will bring you a summary of the winning talks in the next issue.

The AGM saw several NZES council members ending their term. John Sawyer will remain on the council for one year as immediate past-president, but he has handed the reins over to the new Society President, Susan Timmons. Thank you to Ingrid Gruner for her hard work on council, in particular her work as Media Liaison. The commitment and hard work of Alison Evans as a council member, and as awards convener over the past few years is greatly appreciated. Welcome to the new council members voted on at the AGM: Bruce Burns (Vice President), Jacqueline Beggs and Roger Dungan.

Kate McNutt is doing a fantastic job representing the NZES on the INTECOL committee, which is scheduled for Brisbane 2009. This is a huge undertaking, and Kate looking for support from society members; please see the INTECOL article from Kate below.

The recent media release from the NZES regarding Land Tenure Review has sparked some debate amongst NZES members. We have printed the media release below in case you missed it. We have also included some background from the NZES council meeting and AGM in which the decision was made to generate the release. The newsletter is an open forum for debate, so we encourage you to put your views into a letter to the editors on this important issue.

The deadline for submissions for the last issue of this newsletter for 2006 will be 13 November.

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

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## LAND TENURE REVIEW – MEDIA RELEASE

Media Advisory  
31 August 2006

The media release printed below was generated following a presentation made to the NZES council by Susan Walker on her paper regarding the tenure review process and the impact on loss of lowland biodiversity. The issue was then discussed by Council, including concern regarding scientific ecological information being used through the tenure review process. The option of making a press release was discussed. It was decided that if NZES was to make a statement, it would concentrate on whether the science is being respected, and recommending an audit of the process. It was agreed that Council should take it back to the AGM to get endorsement of the approach, and get feedback and consensus from members.

### **The following are notes from the AGM:**

At the AGM it was explained that a press release has been made regarding Susan Walker's paper at the conference on the biodiversity implications of the South Island High Country tenure review. It was explained that there is concern about the inadequacy of the process, the use of scientific information to aid decision making, and the need for an audit of the process. Feedback was requested from members. The council's concerns are around the effective use of ecological information and research in decision making. Comments from members included an explanation of Environment Canterbury's concerns, including ecological concerns, public access and waterways. There was general agreement amongst members at the AGM that the council is empowered to make statements on behalf of members and general support for the approach taken.

### *Land Tenure Review failing the Public Interest*

Serious concerns have been raised at the New Zealand Ecological Society's annual conference that the process of South Island high country tenure review is failing to meet conservation and biodiversity objectives.

A study undertaken by scientists at Landcare Research, to be presented at the conference tomorrow (September 1) shows that the tenure review process is likely to lead to further loss of biodiversity. Delegates have expressed concerns that the outcomes of the process are not in the public interest and do not meet government objectives.

Tenure review refers to the land reform currently undertaken on Crown pastoral leases in the South Island high country. The reform affects about 20% of the total land area of the South Island (2.4 million hectares), and allows the 304 lessees to freehold part of the former Crown lease while the remainder becomes public conservation land.

In their study, Susan Walker and Robert Price, of Landcare Research, and Theo Stephens, DOC, use data from properties that have already completed the land reform to analyse whether national targets of biodiversity protection are being met.

Highest priority areas for biodiversity protection are in dry rainshadow intermontane basins and valley floors. These areas hold the greatest densities of threatened plants, but are poorly protected and nationally much reduced. According to the study, it is exactly these areas that tend to be privatized through tenure review, putting these important habitats at increased risk of loss and degradation. Areas added to public conservation land through the review are usually at higher altitude with habitats that are more widespread and at less risk of loss. As such, this privatisation process is not achieving environmental and conservation objectives of the Crown Pastoral Land Act (1998), the NZ Biodiversity Strategy, and more recent government directives.

Dr Susan Walker, Landcare Research, will present the results of this study on Friday morning (September 1). The conference is the third joint conference of the New Zealand and Australian Ecological Societies.

The abstract from Susan's talk is below:

### **Assessment of risk of biodiversity loss in New Zealand and its application to Land Tenure Review.**

Susan Walker (Landcare Research), Robert Price (Landcare Research) and Theo Stephens (Department of Conservation)

New Zealand has a highly non-representative reserve network, and loss and degradation of its remaining indigenous habitats is continuing, especially in much reduced and poorly protected environments. A spatially explicit index of risk of biodiversity loss is developed for New Zealand, and its operational application to guiding protection priorities and measuring achievement is demonstrated for the process of Tenure Review of Crown Pastoral Leases in the South Island High Country. Highest priority areas for biodiversity protection on Crown Leases are in dry rainshadow intermontane basin and valley floor environments that are poorly protected and much reduced nationally, that hold the greatest densities of threatened plants, and are at most risk of loss and degradation. Through Tenure Review, the Crown is exacerbating historic patterns of indigenous biodiversity loss by removing historic vegetation clearance constraints from important habitats and ecosystems. Additional protection for indigenous biodiversity has been achieved mainly in a few, least vulnerable (i.e. most intact and best protected) high elevation environments. Our data show Tenure Review outcomes for biodiversity are predictable (habitats and species at high risk of loss are likely to be privatised, while those least requiring protection are protected) and are deteriorating as the process continues.

### **POSTER PROMOTION OF NZJECOL BACKISSUES ON-LINE**

Posters have been created to promote the New Zealand Ecological Society and the online availability of back issues of the *New Zealand Journal of Ecology* online. As part of this promotion process, and wanting to provide a memorable website name, the NZES website is now found at [www.NewZealandEcology.org](http://www.NewZealandEcology.org). We also wanted to distance our website address from that of the New Zealand Election Study at [www.nzes.com](http://www.nzes.com). Note that we will still keep our old site name of [www.nzes.org.nz](http://www.nzes.org.nz) working so that all the links out there in web land will continue to work, and the website is also found at [www.NewZealandEcology.org.nz](http://www.NewZealandEcology.org.nz) for you who like typing '.nz'.

Three poster designs have been developed based around three themes: New Zealand flora & fauna, habitats, and invasive species. Each poster features three panels of drawings created by Jon Sullivan and Ruth Guthrie (Lincoln University). The themes for the posters were chosen from Alastair Robertson's NZES newsletter article 'Citation classics from the *New Zealand Journal of Ecology*' which featured the top 30 most cited papers to have appeared in *NZJE* since it began in 1978 (see Newsletter #102, July 2002).

The first of the posters, featuring New Zealand flora and fauna, was launched at the joint NZES and ESA conference, Ecology across the Tasman, held in Wellington last month.

The panels of the poster feature (from left to right):

*Panel 1:* North Island Kokako (*Callaeas cinereus wilsoni*), Puriri moth (*Aenetus virescens*), and White rata (*Metrosideros perforata*).

Leathwick, J.R., Hay, J.R. and Fitzgerald, A.E. 1983. The influence of browsing by introduced mammals on the decline of North Island kokako. *New Zealand Journal of Ecology* **6**: 55–70.

*Panel 2:* The (extinct) slender bush moa (*Dinornis struthiodes*), Kowhai (*Sophora microphylla*), Kowhai moth (*Uresiphita polygonalis maorialis*) and the Common bag moth (*Liothula omnivora*).



**New Zealand Ecological Society**



**New Zealand Journal of Ecology**



www.NewZealandEcology.org

50 years of backissues of New Zealand Journal of Ecology, NZ's premier ecological science journal, are available free on the web. Web conversion funded by the NZ Government's Terrestrial & Freshwater Biodiversity Information System.



**New Zealand Ecological Society**



**New Zealand Journal of Ecology**

The New Zealand Ecological Society was formed in 1951 to promote the study of ecology and the application of ecological knowledge in all its aspects. Through its activities, the society strives to encourage ecological research, increase awareness and understanding of ecological principles, promote sound ecological planning and management of the natural and human environment, and promote high standards among practising ecologists.

N.Z.E.S. publishes the **New Zealand Journal of Ecology**, New Zealand's premier ecological science journal. All issues, since 1952, are now available on the internet. All issues > 3 years old are free.



a. North Island Kokako, *Callaeas cinereus wilsoni*  
 b. Puriri moth, *Aenetus virescens*  
 c. White rata, *Metrosideros perforata*

a. The slender bush moa, *Dinornis struthioides* (extinct)  
 b. Kowhai, *Sophora microphylla*  
 c. Kowhai moth, *Uresiphita polygonalis maorialis*  
 d. Common bag moth, *Liothula omnivora*

a. New Zealand fur seal, *Arctocephalus forsteri*  
 b. Blue maomao, *Scorpius violaceus*  
 c. Orange biscuit star, *Asterodon millarisi*  
 d. Bull kelp, *Dunvillea antarctica*  
 e. Large-bellied seahorse, *Hippocampus abdominalis*

Leathwick, J. R., Hay, J. R., and Fitzgerald, A. E. 1983. The influence of browsing by introduced mammals on the decline of North Island kokako. **New Zealand Journal of Ecology** 6:55-70.

Atkinson, I.A.E. and Greenwood, R.M. 1989. Relationships between moas and plants. **New Zealand Journal of Ecology** 12(suppl.):67-96.

Holdaway, R. N. 1989. New Zealand's pre-human avifauna and its vulnerability. **New Zealand Journal of Ecology** 12(suppl.):11-25.

Mattlin, R.H. 1978. Pup mortality of the New Zealand fur seal (*Arctocephalus forsteri*, Lesson). **New Zealand Journal of Ecology** 1:138-144.

www.NewZealandEcology.org



Aikinson, I. and Greenwood, M. 1989. Moa–plant relationships. *New Zealand Journal of Ecology* **12(suppl.)**: 67–96.

Holdaway, R.N. 1989. New Zealand's pre-human avifauna and its vulnerability. *New Zealand Journal of Ecology* **12(suppl.)**: 11–25.

*Panel 3: New Zealand fur seal (Arctocephalus forsteri), Blue maomao (Scorpius violaceus), Orange biscuit star (Asterodon miliaris), Bull kelp (Durvillaea antarctica), and the Large-bellied seahorse (Hippocampus abdominalis).*

Mattlin, R.H. 1978. Pup mortality of the New Zealand fur seal (*Arctocephalus forsteri*, Lesson). *New Zealand Journal of Ecology* **1**: 138–144.

The posters have been printed with funding from the New Zealand Government's Terrestrial and Freshwater Biodiversity Information System (TFBIS). This programme is devoted to making important biodiversity information widely available. The posters will be sent to libraries and schools New Zealand wide.

## INTECOL

NZES and ESA are working hard together on the joint organisation of INTECOL 10, the 'Olympics' of ecological conferences (Brisbane 2009). We have recently contracted Tour Hosts to take responsibility as the primary conference organiser. Tour Hosts are one of the largest and most respected conference organisers in Australia and we are confident they will deliver a professional and memorable INTECOL conference, the first in the southern hemisphere. The trans-Tasman scientific committee is already outlining a comprehensive scientific programme and we are starting to plan potential NZ based pre and post fieldtrip options.

However, we still need help in the area of sponsorship! The more sponsorship the conference receives the greater the benefits to participants. We urgently seek a couple of people to help sniff out sponsorship opportunities in New Zealand — you wouldn't need to negotiate the actual deals (as Tour hosts will do that) but we do require a couple of pragmatic and creative individuals who could work as a team.

We have had one possible offer of assistance but it would be more successful if we had two people making the first contact with sponsors. If you think you could offer some assistance please contact Kate McNutt [kmcnutt@doc.govt.nz](mailto:kmcnutt@doc.govt.nz) or (03) 371 3695.

## NZES AWARDS

Below are the nomination support letters for three awards that were given at the recent conference to Dr. Matt McGlone, Dr. Colin Meurk, and Professor Dave Kelly. Congratulations to all three!

## NEW ZEALAND ECOLOGICAL SOCIETY TE TOHU TAIAO – AWARD FOR ECOLOGICAL EXCELLENCE

### Dr Matt McGlone

It is fortunate for New Zealand science that Matt McGlone's diverse interests, extreme enthusiasm and intellectual drive have been directed towards numerous aspects of New Zealand ecology. Matt's inaugural contribution to ecology began with his first publication in the early 1970s entitled "collembola aggregations on a bowling green". This paper seems like a surprising start to his career in retrospect, but fortunately his focus shifted away from sporty invertebrates and settled instead upon the post-glacial ecological and climate change history of New Zealand where he has made an enormous contribution. Matt has spent, and still spends, numerous hours toiling away under his microscope counting endless pollen grains from peat bog profiles throughout New Zealand. This laborious work has resulted in the production of over 100 regional histories of vegetation



Matt McGlone, circa 1973

and climate from Northland to Campbell Island, covering the last 10,000–20,000 years. His research has greatly expanded our understanding of the origins of present-day plant distributions and ranges, and their responses to climate change. This work is becoming increasingly important in underpinning broader-scale conservation management decisions. Maybe the hours spent brooding over his microscope has allowed Matt, the polymath, to develop one of his outstanding skills. This is being able to synthesise large amounts of information from different fields and come up with new and often provocative ideas and review articles. Matt is a serial obsessionist which has meant that his influence has not just been confined to the fields of palaeoecology and climate change. He has also enjoyed productive collaborations with others to make major contributions to a wide range of other topics including plant biogeography, endemism, climatic adaptations of New Zealand plant species, strategies for divaricating leaf forms, impacts of earthquakes and volcanic eruptions, marine sedimentation, recent estuarine change, early human settlement impacts, honey pollen-typing, pollen-based forensic evidence (no doubt he gleefully put people away), pollen analysis of fossil dung and bat droppings to name just a few. Fortunately, his enthusiasm for new topics appears to be tireless and ongoing. Many will remember fleeing from him in the corridors when he is in one of his enthusiastic phases, for example his development of 'photo-sensitive light-meters', where he would seize upon anyone, even a poor stranger in a toilet apparently, to pontificate in a little too much detail about his latest theories and developments. Such passion and obsession is often what pushes science and technology ahead. It certainly helped Matt to publish over 100 scientific articles in overseas and locally published journals on various topics. His earliest contribution to the NZ Journal of Ecology in 1989 on 'The Polynesian settlement of NZ in relation to environmental and biotic changes' still remains one of Matt's and the journal's most cited papers. Another of his papers published in the NZ Journal of Botany in 1985 has also become a citation classic on 'Plant biogeography and the late Cenozoic history of New Zealand'. Both papers highlight two areas of major influence he has had in ecology. More recent reviews he has written ranging from the history of bracken fern in New Zealand, the origin of indigenous grasslands in the South Island, the post-glacial vegetation history of the subantarctic islands and deciduousness in the New Zealand flora appear likely to taken up the same way; his ideas are already permeating into many different fields of research.

Since the early 1980s Matt has had roles in senior management positions, including acting director of Botany Division DSIR for a year, and a number of science leadership roles in Landcare Research, and has always been a strong champion of ecology. His spell as the Science Advisor to the Minister of Crown Research Institutes and MoRST in 1997 also recognised his extensive experience and ideas as an ecologist, a science leader and policy contributor. Perhaps the most shocking aspect of this job for Matt was having to confess to everyone that he wore a suit and tie for the duration of his role in the beehive (apparently only to remain incognito amongst all the other suit wearers). He has put enormous effort into writing and contributing to difficult and influential policy documents; for example, for the Ministry for the Environment on climate change; a strategic report on the Foundation for Research Science and Technology's climate change investment portfolio; and the Natural Heritage Management System, the recommendations of which have helped define a comprehensive monitoring system being progressively implemented by DOC.

Matt's contribution to ecological science has been recognised in the past by the McKay Hammer Award from the NZ Geological Society in 1985, and the Cockayne Memorial Lecturer in 2001 from NZ Royal Society. Matt's more unspoken influence on ecology is through his inspiration of numerous ecology students and colleagues over the years with his capacity for endless debate and generation of ideas on almost any subject matter. His mentoring of students has

left a strong legacy in New Zealand ecology, as these students have gone on to make their own successful careers in ecology, within Universities, Crown Research Institutes and the Department of Conservation.

Many may remember one of Matt's first presentations to a NZES conference back in the early 1980s when his long red beard fell gracefully to his waist and he looked like a prophet. The two talks were on creationism: 'Noahs Ark – what do we know after 4000 years?', and 'Scientific Creationism, the Bible says No'. The latter was accompanied by a multi-choice questionnaire on the bible distributed during the talk, which apparently was easy to mark as all the answers were correct. These were just the start of many provocative talks that he has given over the years, and for which he has become well known.

Janet Wilmshurst

## NEW ZEALAND ECOLOGICAL SOCIETY ECOLOGY IN ACTION AWARD

### Dr Colin Meurk

The description of the person worthy of this award reads like it was written for Colin. I quote "This award was established to recognise individuals who are achieving excellence and best practice in the promotion of ecology, including communication, education and transfer of ecological knowledge at the grass roots". This, in essence, describes Colin's life.

I have never met anybody so passionate about ecology and so committed to sharing his knowledge. Be it to high school students, university students, the public, city councillors, the tanga te Whenua, Colin talks to them all. This passion has led to numerous successes in the practical protection and restoration of biodiversity, particularly in threatened lowland ecosystems. Of the many, Colin's greatest success would probably be the protection and restoration of Travis Swamp in Christchurch. If it was not for his enduring passion and commitment, Travis Swamp today would be an urban subdivision. It is one thing to be passionate about saving native biodiversity, but if that is not coupled with a wealth of ecological supporting knowledge, successes are few. In this instance, Colin used both his passion and ecological knowledge to great effect.

You will rarely find Colin at home, if he is not addressing the Springston Garden Club on ways to enhance biodiversity in their backyards, or showing rare plants to locals on yet another "Meurky" walk around the Port Hills, or at a meeting of the Travis Wetland Trust, he is probably instilling into City Councillors the virtues of fleshy-fruited native plants as tucker for native birds.

Colin is "Ecology in Action"

Glenn Stewart

## NEW ZEALAND ECOLOGICAL SOCIETY HONORARY LIFE MEMBERSHIP

### Professor Dave Kelly, BSc(Hons) Massey, PhD Cambridge, FRSNZ

1974–78 B. Sc. Hons (First class) in biology, Massey University, New Zealand

1979–82: Ph. D., Cambridge University, U.K. in plant ecology

1984–85: Postdoc fellow at Massey University, researching biological control of thistles.

#### *Dave Kelly – the Scholar*

Dave's work has published widely (he has produced approx. 90 referred publications, the first appeared in 1982). His work appears regularly in both local and international journals, and has achieved high impact through citations (more than 1100, and more than 100 citations to the Kelly [1994] TREE article alone).

## Selected Publications

## Masting

- Norton, D. A. & Kelly, D. (1988). Mast seeding over 33 years by *Dacrydium cupressinum* Lamb. (rimu) (Podocarpaceae) in New Zealand: the importance of economies of scale. **Functional Ecology**, 2, 399–408.
- Kelly, D. (1994). The evolutionary ecology of mast seeding. *Trends in Ecology and Evolution*, 9, 465–470.
- Kelly, D. & Sullivan, J. J. (1997). Quantifying the benefits of mast seeding on predator satiation and wind pollination in *Chionochloa pallens* (Poaceae). **Oikos**, 78, 143–150.
- Tisch, P. A. & Kelly, D. (1998). Can wind pollination provide a selective benefit to mast seeding? *Chionochloa macra* (Poaceae) at Mt Hutt, New Zealand. **New Zealand Journal of Botany**, 36, 637–643.
- McKone, M. J., Kelly, D. & Lee, W. G. (1998). Effect of climate change on masting species: frequency of mass flowering and escape from specialist insect seed predators. **Global Change Biology**, 4, 591–596.
- Kelly, D., Hart, D. E. & Allen, R. B. (2001). Evaluating the wind-pollination benefits of mast seeding. **Ecology**, 82, 117–126.
- Kelly, D., Harrison, A. L., Lee, W. G., Payton, I. J., Wilson, P. R. & Schaubert, E. M. (2000). Predator satiation and extreme mast seeding in 11 species of *Chionochloa* (Poaceae). **Oikos**, 90, 477–488.
- Sullivan, J. J. & Kelly, D. (2000). Why is mast seeding in *Chionochloa rubra* (Poaceae) most extreme where seed predation is lowest? **New Zealand Journal of Botany**, 38, 221–233.
- Kelly, D. & Sork, V. L. (2002). Mast seeding in perennial plants: why, how, where? **Annual Review of Ecology and Systematics**, 33, 427–447.
- Rees, M., Kelly, D. & Bjornstad, O. (2002). Snow tussocks, chaos, and the evolution of mast seeding. **American Naturalist**, 160, 44–59.
- Schauber, E. M., Kelly, D., Turchin, P., Simon, C., Lee, W. G., Allen, R. B., Payton, I. J., Wilson, P. R., Cowan, P. E. & Brockie, R. E. (2002). Synchronous and asynchronous masting by 18 New Zealand plant species: the role of temperature cues and implications for climate change. **Ecology**, 83, 1214–1225.
- Buonaccorsi, J. P., Ellenton, J., Koenig, W. D., Duncan, R. P., Kelly, D. & Sork, V. L. (2003). Measuring masting behavior: relationships among population variation, individual variation and synchrony. **Journal of Theoretical Biology**, 224, 107–114.
- Koenig, W. D., Kelly, D., Sork, V. L., Duncan, R. P., Ellenton, J. S., Peltonen, M. S. & Westfall, R. D. (2003). Dissecting components of population-level variation in seed production, and the evolution of masting. **Oikos**, 102, 581–591.

## Plant Demography

- Kelly, D. (1984). Seeds per fruit as a function of fruits per plant in 'depauperate' annuals and biennials. **New Phytologist**, 96, 103–114.
- Kelly, D. (1985). On strict and facultative biennials. **Oecologia**, 67, 292–294.
- Kelly, D. (1985). Why are biennials so maligned? **American Naturalist**, 125, 473–479.
- Kelly, D. (1989). Demography of short-lived plants in chalk grassland. I. Life cycle variation in annuals and strict biennials. **Journal of Ecology**, 77, 747–769.
- Kelly, D. (1989). Demography of short-lived plants in chalk grassland. II. Control of mortality and fecundity. **Journal of Ecology**, 77, 770–784.
- Kelly, D. (1989). Demography of short-lived plants in chalk grassland. III. Population stability. **Journal of Ecology**, 77, 785–798.
- Kelly, D. (1994). Demography and conservation of *Botrychium australe*, a peculiar sparse mycorrhizal fern. **New Zealand Journal of Botany**, 32, 393–400.
- Rees, M., Grubb, P. J. & Kelly, D. (1996). Quantifying the impact of competition and spatial heterogeneity on the structure and dynamics of a four-species guild of winter annuals. **American Naturalist**, 147, 1–32.



Shea, K. & Kelly, D. (1998). Estimating biocontrol agent impact with matrix models: *Carduus nutans* in New Zealand. **Ecological Applications**, 8, 824–832.

Lamoureaux, S. L., Kelly, D. & Barlow, N. D. (2003). Population dynamics in mature stands of *Hieracium pilosella* in New Zealand. **Plant Ecology**, 166, 263–273.

Shea, K., Kelly, D., Sheppard, A. & Woodburn, T. (in press). Context-dependent biological control of an invasive thistle. **Ecology**.

#### Mutualisms

Ladley, J. J. & Kelly, D. (1995). Explosive New Zealand mistletoe. **Nature**, 378, 766.

Kelly, D., Ladley, J. J., Robertson, A. W., Edwards, J. & Smith, D. C. (1996). The birds and the bees. **Nature**, 384, 615.

Robertson, A. W., Kelly, D., Ladley, J. J. & Sparrow, A. D. (1999). Effects of pollinator loss on endemic New Zealand mistletoes (Loranthaceae). **Conservation Biology**, 13, 499–508.

Kelly, D., Ladley, J. J., Robertson, A. W. & Norton, D. A. (2000). Limited forest fragmentation improves reproduction in the declining New Zealand mistletoe *Peraxilla tetrapetala* (Loranthaceae). *Genetics, demography and viability of fragmented populations* (Ed by A. G. Young & G. M. Clarke), pp. 241–252. Cambridge University Press, Cambridge.

Kelly, D., Ladley, J. J. & Robertson, A. W. (2004). Is dispersal easier than pollination? Two tests in New Zealand Loranthaceae. **New Zealand Journal of Botany**, 42, 89–103.

Robertson, A. W., Trass, A., Ladley, J. J. & Kelly, D. (in press). Assessing the benefits of frugivory for seed germination: the importance of the deinhibition effect. **Functional Ecology**.

#### Divaricate shrubs

Kelly, D. & Ogle, M. R. (1990). A test of the climate hypothesis for divaricate plants. **New Zealand Journal of Ecology**, 13, 51–61.

Kelly, D. (1994). Towards a numerical definition for divaricate (interlaced small-leaved) shrubs. **New Zealand Journal of Botany**, 32, 509–518.

Turnbull, M. H., Howell, C. J., Christian, R. & Kelly, D. (2002). Photoinhibition, acclimation, and New Zealand's divaricate plants: A reply to Lusk. **Functional Ecology**, 16, 858–869.

Howell, C. J., Kelly, D. & Turnbull, M. H. (2002). Moa ghosts exorcised: New Zealand's divaricate shrubs avoid photoinhibition. **Functional Ecology**, 16, 232–240.

#### Dave the Supervisor

Dave has supervised dozens of students—many of whom are now prominent ecologists and botanists in University or Research positions. Dave's enthusiasm for ecology and science has inspired a generation of Canterbury University graduates—this is definitely a mutualism—a glance at the publishing highlights shows that many strands have grown out of student theses.

#### Dave and the New Zealand Ecological Society

Dave has been a stalwart of the New Zealand Ecological Society for many years and has served in various capacities more or less continuously since 1993. His pragmatic approach and sagacity has helped steer the society throughout that time and ensured that it continues to remain the effective and vital organisation that it is today. Dave's official roles in the society have been: Treasurer 1990–91; Councillor 1993–2005; Secretary 1998–2003.

#### Dave the Advocate

During Dave's first stint at Massey University, he became known to some as "Cycling Sam"—his column on cycling was a regularly published in the student newspaper Chaff for several years. Dave owns at least 8 bikes (they are all different he says—tandem, folding, mountain, racing, touring etc), a definite example of niche specialisation in action here). Dave continues to be an advocate—along with his contributions to the Ecological Society newsletter ranting about

PBRF, logo-proliferation and too-small pictures in Powerpoint talks, etc. Dave's name frequently appears in the letters to the editor in the Press (close to 100 letters now), submissions to the council on cycling issues, and representing his neighbourhood watch group in consents etc.

#### Awards

Dave's talents have not gone unnoticed—his collections of gongs is starting to look impressive:

- 1851 Exhibition Scholar 1979
- Recipient of the New Zealand Ecological Society Award 2000
- Elected Fellow of the Royal Society of NZ, November 2002
- Invited to present the Royal Society of New Zealand Cockayne Lecture series in 2004
- Promoted to Professor 2005

I have ordered a pre-publication copy of his autobiography:

“Life as an ecological superstar: how I fitted two lifetimes worth of achievements into one, and still be a nice guy”

and, no doubt, there's lots more to come!

Alistair Robertson

### NEW ZEALAND ECOLOGICAL SOCIETY AWARD FOR BEST PAPER BY A NEW RESEARCHER

The New Zealand Ecological Society awards an annual prize of NZ \$500 for the best published paper of an ecological nature, by a new researcher. This award is targeted at people at the start of their research career. This year the award went to James Russell, of the University of Auckland for his paper:

Russell, J.C. and Clout, M.N. 2004. Modelling the distribution and interaction of introduced rodents on the New Zealand offshore islands. *Global Ecology and Biogeography* 13: 497–507.

#### Abstract

**Aim:** To establish the factors that correlate with the distribution of the four most commonly introduced rodent species on New Zealand offshore islands—ship rat (*Rattus rattus*), Norway rat (*R. norvegicus*), Pacific rat of kiore (*R. exulans*) and house mouse (*Mus musculus*)—and examine if these distributions are interactive at the archipelago scale.

**Methods:** Data on the distribution of all four introduced rodent species and the characteristics of New Zealand offshore islands were collated from published surveys and maps. The distribution of individual rodent species was regressed on island characteristics using a logistic generalised linear model. Interactions were examined by including the distributions of other rodent species as predictors in models.

**Results:** All four rodent species appear to be limited by a variety of factors, which differ between species in both number and type. The distribution of ship rats is limited by the most factors, reflecting the extent of its distribution across the archipelago. The distribution of mice is the least explicative. Only the three rate species interacted in their distribution. The distribution of kiore on offshore islands is significantly negatively related to that of ship rats and to a lesser extent Norway rats. The distribution of mice did not appear affected in any way by the number of other rodent species on an island.

**Main conclusions:** Differences in competitive ability and dispersal allow all four species to inhabit the New Zealand archipelago. Kiore distribution appears to be most limited by ship rat (and to a lesser extent Norway rat) distribution. The distribution of kiore was not found to interact with the distribution of mice on offshore islands, as has been suggested by others. The distribution of mice on offshore islands was difficult to model, which highlights the difficulties in managing this species. Overall the results offer valuable insights for management methods to assist preventing the invasion of offshore islands.

## NEWS FROM COUNCIL

*Editors note: Edited and abridged minutes*

### **Minutes of NZ Ecological Society Council Meeting 9.30am 5 May 2006, Department of Conservation, Christchurch**

**Present:** John Sawyer (chair), Shona Myers (minutes), Mel Galbraith, Rachel Keedwell, Ingrid Gruner, Kate McNutt, Peter Bellingham (until 12.30), Ruth Guthrie, Alison Evans, Susan Timmins (from 10am)

**Apologies:** Jon Sullivan, Hannah Buckley, Karen Denyer

**Minutes of last meeting:** It was noted that Alison Evans was present but not recorded in minutes. Moved (John Sawyer) that they be accepted as a true and correct record, with above change, seconded Mel Galbraith.

#### *Treasurer's report*

Rachel Keedwell presented the annual report and financial statement for March. Despite a loss in 2005 the society is in a healthy financial position with a cash reserve of \$58,509 and the Kauri fund now at \$17,064. The bank accounts are also earning a much higher interest rate of 6–7%, much more than the previous term deposits. Expenditure, however, is generally exceeding income. The largest costs include journal production, council expenses and secretariat costs, with journal printing the biggest expenditure. A discussion on options for cutting various costs followed.

Peter Bellingham emphasised that reducing journal printing costs should not compromise the need for a professional looking journal. He explained that printing costs have increased recently due to bigger issues and also postage. The possibility of setting a finite number of pages for the journal was discussed.

Christchurch was identified as the cheapest place to hold council meetings. The option of holding every second council meetings with only the main 4 office holders, was suggested and it was agreed that this would be workable. A lot of work and correspondence can be done through email. A profit of approximately \$5,000 is relied on each year from the annual conference. It was generally agreed, however, that the main purpose of the conference should not be overshadowed by the need to make a profit. Subscriptions are the main income of the society. Membership numbers have dropped from 599 in 2004 to 579 in 2005. The option of increasing subscription fees was discussed and there was agreement that a small increase is justified. It was also noted that options for increasing membership numbers also need to be addressed.

Moved (John Sawyer) that a recommendation be taken to the 2006 AGM that all waged subscription fees be increased by \$5 per member, except for overseas waged which will increase by \$10 per member, seconded (Susan Timmins).

Approximately \$2400 of interest is transferred to the Kauri Fund each year. A reduction of funds being transferred to the kauri fund was suggested. Secretariat costs are approx \$8,500 plus admin fees of over \$2,000.

Reducing newsletter printing costs was discussed. Over half of members now receive an electronic version.

Moved (Peter Bellingham) that council abolish printing the newsletter and provide only an electronic online version. The motion was put to the vote and was carried, with all in favour.

Four main mechanisms for rationalising costs were therefore proposed:

1. provide newsletter as online option only
2. rationalise number of full council meetings
3. investigate reducing printing cost of journal
4. reduce kauri fund transfer to \$20 per month.

Moved (John Sawyer) a big thank you to Rachel for her work on the budget, including the transfer of accounts and subsequent increased income from interest, seconded (Shona Myers).

*Journal editor's report*

Peter Bellingham gave an update. Issue 30 (1), the special issue arising from the Nigel Barlow symposium, is on track for publication in June 2006. At least 11 papers are in the issue, with 4 available on line. Issue 30 (2) is a normal issue for which 10 papers have been accepted, with 3 of these papers available on line. This issue is expected to be in print in June 2006. A slimline edition is planned for October to help increase the citation index. An updated style guide is also planned. There has been a slow start to submissions in 2006 compared with 2005. This may be due to the FRST bidding round. Susan asked where submissions are coming from. DoC staff does not tend to publish. This may be due to the lack of professional incentives and the management nature of the work. The idea of a conservation notes section was discussed and it was questioned where conservation management is published. Peter emphasised the importance of high quality science for the journal. Shona explained that some council are undertaking management related research that is not formally published and emphasised the importance of published science in backing decision making. The need for a forum for publishing conservation management was discussed, including the role of the newsletter. This may encourage debate on this issue.

Mel put forward the idea of a special journal edition of research on Tiritiri Matangi Island. The Tiritiri Supporters Group could fund this. There was general support for this idea. The suggestion of preceding a journal with a special workshop at a conference was discussed.

*INTECOL*

Kate McNutt reported that the NZ representatives on the Scientific Committee are Dave Kelly, Angus Mackintosh and Carol West. A company in Australia has also been contracted to handle media issues. The idea of setting up a NZ company will not be pursued until there is a need. A sponsorship subcommittee has been set up. NZ sponsorship still needs to be sought. Kate has asked John Sawyer to assist with this. Sponsorship will be needed for NZ workshops and field trips.

*Education strategy*

Karen Denyer's draft Education Strategy was discussed. A final draft could be tabled at the AGM. Susan suggested that Karen run a workshop or presentation at the conference.

*1080 submission*

The idea of a NZES submission on 1080 was discussed. Susan suggested that any discussion on 1080 should be centered on data rather than anecdotes. A list of *NZ Journal of Ecology* papers on 1080 e.g. Ian Atkinson review of papers could be compiled. It was agreed that information for decision makers should include good published science that covers both sides of the argument.

*Update of Logo*

Ideas for a redesign of the NZES logo were discussed. It was agreed that a new logo should be investigated. Branding is important for promoting the society and the communication of what the society is about. A logo needs to reflect the professionalism of the society and the association with ecology.

*Membership*

Ideas for promoting membership of the society were discussed. A new brochure is needed to advertise the society. This could be combined with the design of a new logo. Posters and membership forms could be sent to Universities. Ingrid suggested that each University have a contact for staff and students. The idea of holding conferences and workshops in remote field orientated locations was also discussed.

## NZ ECOLOGICAL SOCIETY LISTSERVER

If the list of addresses for the NZES listserver was an organism, it would be an old creaky one as the list keeps decaying. Specifically, this means that every month another handful of people change their email address and don't remove it from the list. Then, every time a message is sent to the list, the sender gets a list of errors for the dead (or temporarily blocked, or whatever) addresses. So I regularly remove them to keep the list of error messages down.

I thought it might be helpful to list the addresses that have been recently removed, so if you didn't mean to be and see your address here you can re-subscribe (see instructions below). After all, it would be a bit rough if your account was temporarily blocked, I removed your address, and you didn't know. Here is the latest list of removed addresses as at 2 June 2006.

admin@nz-ecology.net  
 AHerbert@BlackburnPress.com  
 carryn@slingshot.co.nz  
 chris.lee@cab.gov.on.ca  
 cjmilller@dlwc.nsw.gov.au  
 G.Odoherty@liverpool.ac.uk  
 judithrl@datacomm.ch  
 Kerry.Bodmin@waitakere.govt.nz  
 kz7@uclink.berkeley.edu  
 lauren@elchambers.co.nz  
 lmarshall@doc.govt.nz  
 Melanie.Dixon@wrc.govt.nz  
 moles@nceas.ucsb.edu  
 rachael\_greaves@hotmail.com  
 rossjg@tui.lincoln.ac.nz  
 rstanley@doc.govt.nz  
 Z.Hazell@plymouth.ac.uk

If you have been unjustly removed, simply subscribe again (see below). If you are unsure if you are still on, just subscribe again and it will tell you if you were already on, and take no other action.

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, 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 listserv will automatically receive all emails sent to the listserv, and can send e-mails to all subscribers via the listserv. You can subscribe and unsubscribe from a listserv at any time.

#### The NZ Ecological Society listserv

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

#### Subscribing to the NZ EcoSoc listserv

To subscribe to this server, e-mail a message to the automatic Mailserv processor at:

[nzecosoc-request@it.canterbury.ac.nz](mailto: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 INSTRUCTIONS AND FOLLOW THEM.

### **Sending list messages**

To send a message to everybody on the list, use the address, [nzecosoc@it.canterbury.ac.nz](mailto: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 a message, send it to Dave Kelly ([Dave.Kelly@canterbury.ac.nz](mailto: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 can click on if they want, or give a contact email address where people can ask for it
- Only send stuff that is likely to be of general interest to NZ ecologists

### **Replying to list messages**

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

### **If you change your email address**

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

For information on the listserver contact me, Dave Kelly ([Dave.Kelly@canterbury.ac.nz](mailto:Dave.Kelly@canterbury.ac.nz)).

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

(Effective from September 2006)

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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](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 13 November 2006.**

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

## MEMBERSHIP

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

### **Types of Membership and Subscription Rates (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:

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PO Box 25 178  
Christchurch  
NEW ZEALAND

or e-mail: [info@nzes.org.nz](mailto:info@nzes.org.nz)

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