# Ecological Society Newsletter

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#### FROM THE EDITOR

As an academic ecologist, I often get frustrated with the general public's perception that as such, I must be an environmentalist, and that my teaching and research must be all about trying to ameliorate human impacts on the earth. People are often quite surprised to learn that many ecologists are scientists who just want to understand how species interact, populations are regulated, how communities are assembled, and how ecosystems work. What's the use of that they say? Why aren't you out there trying to save the planet? Usually, I respond by talking about the conservation implications of my work and why biodiversity is important and so on. But sometimes, I do wonder—who is saving the planet? Some recent figures on just how greedy we are as a species, never cease to amaze, depress and frighten me. Let's consider two resources—fresh water, and net primary production.

#### Water

Humans now use 26% of the total terrestrial evapotranspiration and 54% of the runoff of freshwater (Postel et al 1996). Some cultures use more than others—we in the developed world, use a lot more than developing areas.

Water use per capita (cubic metres) – UNEP (2004)

North America	1280
Europe & Australia	694
Asia	535
Latin America	311
Africa	186

#### **Terrestrial Net Primary Production**

Again, resource use varies from place to place, and now the East tends to use more than the West, due to population densities. In some parts of the world, humans consume (or waste in many cases) more than 80% of the amount of NPP that the land they live on produces.

# Per capita use (% of local NNP) – Imhoff et al (2004)

Africa	2.08 (12.4%)
East Asia	1.37 (63.25%)
South central Asia	1.21 (80.39%)
Western Europe	2.86 (72.22%)
North America	5.40 (23.69%)
South America	3.11 (6.09%)
Global Average	~20% of Total NPP

#### Low carb diets have got to be a bad idea!

Recent fads for low carbohydrate diets promoted in the west as a miraculous weight-reducing diet where you eat as much junk food as you like as long as you lay off carbohydrate like vegetables and fruit ain't going

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to help. Putting aside the health considerations, these kinds of diets can only increase per capita consumption of these resources. Measured as land area (m2) required to produce 1 kg of produce, in the Netherlands, meat production requires between 9 and 21 m<sup>2</sup> year kg<sup>-1</sup>, cheese  $(10 \,\mathrm{m}^2)$  and eggs  $(3.5 \,\mathrm{m}^2)$ —the staple components of the Adkins diet and other low carb diets, while flour (1.6) vegetables (0.3), and fruits (0.5) require much smaller areas of land (Gerbens-Leenes & Nonhebel 2002). It is clear that these diets are not only expensive on the pocket but globally unsustainable and are only likely to increase the disparity between consumption per capita between East and West even more extreme. Global demand for space to generate the resources used by humans is around 2.3 hectares per person, (we only actually have 1.9 ha each) but in the US the figure is 9.7 hectares, UK 5.4 ha, Germany 4.7 ha (Wackernagel et al 2002).

It is pretty clear that as a species, we have extremely big (and clumsy) feet and tread pretty heavily on this world of ours. Humans represent approximately 0.5% of the heterotroph biomass on earth (O'Neill & Kahn 2000), and yet we appropriate vastly more than this share of the world's resources. The concept of evaluating the "ecological footprint" of the human species has stimulated ecological economists to calculate to what extent we currently use resources. Some scientists reckon we exceeded the earth's carrying capacity in 1981 and have now overshot by >20% (Wackernagel et al 2002).

#### References

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# 52nd ANNUAL GENERAL MEETING OF THE NEW ZEALAND ECOLOGICAL SOCIETY

#### As usual, the AGM of NZES will be held during the annual conference on Tuesday 31 August 5.30pm – 7pm in the Waiau Room, Ascot Park Hotel

All members are urged to attend. The minutes of the 51st AGM can be found in issue 108 of the newsletter which is now online at the NZES page at <a href="http://nzes.org.nz/newsletter/no108.html">http://nzes.org.nz/newsletter/no108.html</a>, two motions have been proposed—see issue 109 for details <a href="http://nzes.org.nz/newsletter/no109.html">http://nzes.org.nz/newsletter/no109.html</a>. Members are reminded that, since it is now less than 28 days from the AGM, it will be too late to put a significant motion to the

meeting, except by consent of more than two-thirds of the members present. Normally these meetings take around  $1-1^{1}/_{2}$  hours, so you won't be made to starve for too long!

#### Call for nominations for council

Nominations are now invited for office holders on the NZES council. We already have nominations for President, Treasurer, Secretary, and three of the four councillor positions, but we are seeking nominations for vice-president, a councillor, and newsletter editor.

Nominations should either be sent in writing to the secretary by the time of the AGM with a signed statement indicating willingness to be nominated from the candidate, or made at the AGM provided the candidate is present to consent to the nomination, or has a signed statement of willingness to be nominated in advance. If more than one nomination is received for a position, we will run a ballot among members present at the AGM.

## PRESIDENT'S ANNUAL REPORT

Although it has been a short 'year' since the Annual Conference in Auckland in November 2003, it has been one of considerable change and progress. At the last AGM we farewelled a large part of the NZES team—Janet Wilmshurst finished her term as President; Dave Kelly officially stepped aside as secretary and Shona Myers picked up this role, and Ben Reddiex passed on the Treasurer's books to Rachel Keedwell. We also welcomed John Sawyer as Vice-President, and Kate McNutt as councillor. Dave Kelly, as many of you will appreciate, is the institutional memory of the Society, and has greatly assisted Council this year by sitting in on meetings as a co-opted member of council. I thank Dave for his help this year, and for his years of service to the Society.

We also saw two changes of Editor of the *New Zealand Journal of Ecology*. David Wardle finished his five year term and Richard Duncan as took over as new Editor. Personal circumstances forced Richard to pass on the editorship to Duane Peltzer and Peter Bellingham, who have picked the up the editorial duties with belying ease. Jenny Steven continues to bring it all together as Technical Editor. We have been, and continue to be, well-served by strong editorship of the Journal, and of behalf of the Society I thank all of the above for their contributions.

Our journal continues to attract an increasing number of manuscripts, and continues to be widely read and cited internationally. The *New Zealand Journal of Ecology* enjoys a respectable Science Citation Impact Factor (as discussed in Newsletters 103 to 106). This is good news indeed, given that, internationally, journals of small independent scientific organisations are strug-

gling to survive. *NZJE* is in good shape, and, with the imminent launch of full online access, is well-placed to foot it in the 21st Century.

The progress in getting all issues of NZJE and its predecessor, The Proceedings of the New Zealand Ecological Society, online has been a real highlight of the past year. Jon Sullivan, and his team at Lincoln, (especially PhD student Sean Fergus) have spent hundreds of hours scanning, 'cleaning up', and proof reading the journal and proceedings, right back to the first issue, published in 1953. Online access is essential for journals to survive today, and all issues older than three years will be freely available online. Jon has led a truly outstanding effort in getting all of this up and running, and we have been fortunate to benefit from his expertise and willingness. I doubt we could have achieved such a good result by using commercial consultants, even if we had the large amount of funding that that approach would have required. The work has been funded by the Government's Terrestrial and Freshwater Biology Information System programme, and we have certainly had good value for money. We have come a long way since 1999, when we did not even have a website.

The Annual Conference was, as ever, highly enjoyable and rewarding ecologically. A highlight for me was to finally get to Tiritiri Matangi Island—guided by past president Carol West who's familiarity with, and passion for the island, made for a highly rewarding and interesting enjoyable trip. I am sure that Invercargill in 2004 will continue our fine tradition of ecologically uplifting and highly social conferences. And of course, it is not too late to register—check out the Society's website <a href="https://www.nzes.org.nz">www.nzes.org.nz</a> for details.

The intention for 2005 is to hold a joint conference with the Limnological Society of New Zealand. This should be an excellent opportunity to build stronger links between terrestrial and aquatic ecology in New Zealand. It is also timely, given the increasing competition for water in New Zealand, and the associated increasing demand for practising ecologists to deal with water-related issues.

The Society continues to grow, with membership of 619 as at 31 December 2003. Our finances are looking healthy too. We have managed to surpass our stated aim of maintaining reserves of one year's expenditure. This healthy state is in large part due to your ongoing membership contributions, which are greatly appreciated. Income from membership fees is critical in maintaining the various functions of the Society—the Journal, newsletter, submissions, and annual conferences.

As well as generally promoting ecology in New Zealand, the Society from time to time seeks to influence broader ecologically related issues. This year, the Society made a submission on The Department of Con-

servation's Draft General Policy and its National Parks Draft General Policy. We also wrote to the *Royal Society of New Zealand* expressing our view that the Marsden Fund – Ecology Evolution and Behaviour Panel lacked representation in some key aspects of ecology, such as ecosystem functioning in general and physiological plant ecology. Our views appear to have been heeded, with the appointment of Bill Lee to the panel.

I am pleased to report that *The Kauri Fund for Ecological Science and Education* is finally official, having been signed by the Trustees (i.e. Council) on 13 February, 2004. This may seem rather surprising news to those of you who bid enthusiastically at the launch of the fund at the 50th Jubilee Conference in 2001. However, rest assured that the Fund is alive and well. It has simply been a prolonged process to get the legal detail correct, and the signatures on paper.

Traditionally, the President of NZES has served for two consecutive one-year terms. However, this will be my first and last term because I am taking up a position in Australia at the beginning of August. Unfortunately, the timing of my appointment means I will not be able to make it to Invercargill for the August conference. John Sawyer, as Vice President will fulfil the presidential duties. I would like to thank the members of council—both elected and *ex-officio*—for their dedication and ability in running the Society. Finding time to do this, and maintaining some sense of momentum and continuity in conducting the society's affairs is not easy, but is done well and enthusiastically. The quality of this collective input is evident in the quality of our journal, newsletter, website, and conferences.

Finally, at this year's AGM, we will need to elect several new councillors and office holders. We also need a new editor for the newsletter to replace Alastair Robertson who steps aside after producing ten fine newsletters since 2001. If you would like to play a greater role in your society, I encourage you to make this known to any of the councillors prior to the AGM at the Invercargill Conference.

#### Mark Sanders

The council of NZES and, I am sure all members, will wish to thank Mark for his year as a president and wish him well for his new position in Australia – editor.

# MEMBERSHIP AND SUBSCRIPTION REPORT

The following table shows the total number of NZES members in different categories as at 8 July 2004. The total count of members includes those in arrears for this year (we assume they will eventually pay) but not those owing for the previous year. The table provides a comparison with membership as at 25/8/03 last year. It shows that membership continues to increase—good news for the society and ecologists, and shows that ecology is a healthy career or study option in NZ. Total membership has increased 13% from 2001 (542 members in 2001) and 9% from 2003. There are, however, a significant number of members (92) who have not yet paid this years' subscription. If most do not pay, membership will be similar to 2003. A reminder notice is being sent out and the conference may also act as a reminder. So please pay your subs (a big thank you to those who have)—it helps the society and the promotion of the field of ecology. The fraction of membership which is unwaged has increased from 2003 to 22%, possibly reflecting the numbers of ecology students in NZ. NB: Full and joint members pay at the full rate, unwaged members get a discounted rate, overseas members pay the full rate plus an overseas postage surcharge, and honorary members are not charged.

Membership of NZ Ecol Soc as at 6/7/04 (with data for 25/8/03 in brackets for comparison)

Category	Paid	Arrears this year	Total	Arrears last year
Full	323 (320)	40 (15)	363 (335)	8 (17)
Joint	39 x 2 (45)	5 x 2 (3)	44 x 2 (96)	2 x 2 (2)
Unwaged	103 (94)	39 (13)	142 (107)	10 (15)
Overseas	22 (19)	3 (2)	25 (21)	1 (3)
Honorary	9 (10)	n/a	9 (10)	n/a
Total	535 (533)	92 (36)	627 (569)	21 (39)

Journal subscriptions as at 8 July 2004 totaled 120 (of which 118 are paid up for the current year). This compares to 117 (112 paid) in 2003 and 108 (95 paid) in 2001. This marks a 10% increase in library subscriptions since 2001. These small annual increases continue to reverse the trends of declining subs in the early 1990s.

Shona Myers, Secretary

## **TREASURER'S REPORT 2003**

Shown below are the audited statements of financial performance and financial position for the New Zealand Ecological Society for the 12 month financial year ended 31 December 2003 (values in this report are GST exclusive).

#### **Financial performance**

The Society made a profit of \$9,376 in the 12 months ended 31 December 2003. This profit is well up on last year's and is mainly attributable to the successful conference run in Auckland last November.

#### **Financial position**

The level of cash reserves at 31 December 2003 was up again from the previous year at \$67,888, which is substantially above the desired minimum level of reserves agreed to at the 1999 AGM at Blenheim (i.e., one year's expenditure which is approximately \$44,000).

Council would appreciate input from members on the general direction that they wish council to take regarding new spending initiatives that further the aims of the Society.

Overall the society is in sound financial position. Thanks are due to the secretariat, last year's conference organisers and to members for renewing their memberships promptly.

Rachel Keedwell, Treasurer



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# **NEW ZEALAND ECOLOGICAL SOCIETY (Inc)**

# **Statement of Financial Performance**

# For the Twelve Months ended 31 December 2003

		12 Months	12 Months
		Dec 2003	<b>Dec 2002</b>
	\$	\$	\$
INCOME			
Members Subscriptions	29,232		27,970
Interest	2,419		2,537
Publications	150		206
Journal Subscriptions	11,880		13,732
Reprints and page charges	3,603		4,612
Conference - 2001	_		39
- 2003	8,981		_
Grant – Royal Society			
Portion spent in current year	_		25,001
Sundry Income	155		520
Journal online	10,000		_
		66,420	74,617
EXPENDITURE			
Journal Production	28,712		25,922
Newsletters	4,340		4,453
Secretariat	7,485		8,165
Subscriptions	1,746		1,732
Council Expenses	338		1,802
Administration	3,656		1,562
Audit Fee	300		300
Awards	436		300
Royal Society Grant expenditure	_		27,703
Web Site	470		44
Tui time	-475		_
Journal Online	10,036		
		57,043	71,983
NET SURPLUS	_	\$9,376	

# **NEW ZEALAND ECOLOGICAL SOCIETY (Inc)**

# **Statement of Financial Position**

# As at 31 December 2003

		<b>Dec 2003</b>	<b>Dec 2002</b>
	\$	\$	\$
FUNDS & LIABILITIES			
ACCUMULATED FUNDS			
Balance 31 December 2002	58,511		55,877
Add Net Surplus	9,376		2,634
-		67,888	58,511
LIABILITIES			
Advance – membership	270		351
Advance – journal subscriptions	489		597
Accounts payable	12,111		1,266
GST Payable	_		_
Kauri Fund	3,587		3,587
-		16,457	5,801
		\$84,344	\$64,312
ASSETS			
Westpac Cheque Account	49,965		25,546
Westpac Term Deposit	20,000		30,000
-		69,965	55,546
Arrears – membership	894		962
Arrears – journal subscriptions	_		67
GST Receivable	1,255		1,389
Sundry Debtors	12,080		5,674
Prepayments	_		524
Stock – Journals	150		150
-		84,344	\$64,312

# JOURNAL EDITOR'S ANNUAL REPORT

The growth in popularity of the New Zealand Journal of Ecology as an outlet for ecological research conducted in New Zealand was especially manifest in 2003 with a record 53 manuscripts received, a 62% increase over the previous record of 1999. Perhaps the journal may be an incidental beneficiary of the inauguration of page charges begun in 2003 in journals administered by the Royal Society of New Zealand. Papers published in 2003 focus on a wide range of terrestrial ecology subjects, and continue the journal's strong focus on applied and conservation-focused research. Forum articles published in 2003 and those forthcoming comment on topical ideas in ecology and many are designed to inform policy makers and practitioners. Rejection rates for manuscripts continue to be c. 40% and is unchanged with increasing submissions.

David Wardle handed over the reins as journal editor to Richard Duncan at the end of 2003, having raised the scientific profile and citation index of the journal substantially during his 5-year tenure. David continues to have input to the journal as he remains on the Editorial Board. During his tenure, he also instituted systems that allow ready tracing of the status of manuscripts, which make the current editors' jobs much easier. Richard Duncan assumed the role of editor in January but unfortunately had to relinquish the editor's role in May this year and now Duane Peltzer and I share the position of acting editor. Richard continues to be available to assist Duane and me in our editorial role.

The Editorial Board has increased in size with the appointment of Chris Lusk (University of Concepción, Chile); Chris is a New Zealander and a plant ecologist and his appointment reflects the growing number of papers submitted with a plant ecological focus. Other current members of the board include Doug Armstrong, Kay Clapperton, David Coomes, Graham Hickling, Ian Jamieson, Gábor Lövei, Mike Winterbourn and David Wardle, and Catriona MacLeod has also served as an interim member of the board when other board members have been unavailable. I thank the board members, and also Duane Peltzer, as Book Reviews Editor, for their service to the journal and I also thank the large number of people required to review the growing number of manuscripts submitted. Both board members and reviewers maintain the standards that ensure the journal's success. Critical to the success of the journal has been Jenny Steven who as Technical Editor sees accepted manuscripts through to publication and does a superb job.

The Ecological Society Council is currently investigating possible changes in methods of publishing the journal and possible changes in format that will facilitate

electronic access to published papers. The journal took a significant step towards ready electronic access to its publications under Jon Sullivan's direction. The Society secured access to funds from the Terrestrial and Freshwater Biodiversity Information Systems programme, administered by the Department of Conservation. These funds have allowed scanning of all back issues of the journal and of its predecessor, Proceedings of the New Zealand Ecological Society. Each paper will be able to be searched for text, and all but issues from the last three years will be available internationally as free access downloadable files. Current (last three years') issues will be available to Ecological Society members only. The papers will be available through the Society's website and these will be available after an official launch of the project at the Society's annual meeting in September. We expect this will raise the journal's profile nationally and internationally.

Peter Bellingham

#### NZES WEBSITE ANNUAL REPORT

#### The numbers

The past year has been another year of growth for the NZES website. Monthly visitor numbers to the website are up on average 65% (range 24%–236%) from their corresponding months last year. In June 2004, the last month of early-bird registration and abstract submission for the annual conference, the site was the busiest it has ever been, visited 9,134 times by 1,520 visitors, up 236% from June 2003.

The most popular areas of the website continue to be the journal webpages, the meetings/conference, and links. For example, in June 2004, the journal webpages were visited 1,568 times, up 167% from June 2003. And this excluded all visits to the draft version of the new full-text pdf site (<a href="http://www.nzes.org.nz/nzje/index.php">http://www.nzes.org.nz/nzje/index.php</a>), which is now available for exploration but remains hidden from the web statistics until it is completed. The newsletter and *HotScience* pages are also increasing in popularity, now getting 100–200 visits a month. In June 2004, visitation for these pages was up by 286% and 530% respectively from June 2003. About 65% of all web traffic over the past year has come from within NZ, little change from last year.

These numbers suggest that the website is being well used. And watch these numbers, as September 2004 will mark the official launch of the society's full-text pdf service for all back-issues of the NZ Journal of Ecology, and Proceedings of the NZ Ecological Society, and all Society Occasional Publications.

Since I adopted the website in June 2002, the site has been visited 78,953 times by 19,890 different visitors (computers). These numbers are tiny compared with the popularity of larger, well-established, data-rich

websites like Landcare Research's site (http://www.landcareresearch.co.nz). Still, the continued healthy growth of the NZES site, with monthly visitor rates now substantially larger than the membership of the society, bode well for its future. They well justify the society's continuing investment in maintaining and building the site.

#### **New developments**



The BIG development on the website over the past year has been our project to include as full-text PDF files all back-issues of the *NZ Journal of Ecology*, and *Proceedings of the NZ Ecological Society*, as well as all Society *Occasional Publications*. This project is near to completion, and is on track for its official launch at the 2004 annual conference in Invercargill.

I have run this project with contracted assistance from Lincoln University students Chris Berry, Sean Fergus, and Lora Peacock, and from my wife Laura Molles. Funding has come from the NZ Government through its Terrestrial and Freshwater Biodiversity Information System (TFBIS) Programme. TFBIS was formed as part of the Government's commitment to the NZ Biodiversity Strategy, to increase the awareness of and access to fundamental data and information about biota and biodiversity.

The draft site is already up and running, and can be accessed at <a href="http://www.nzes.org.nz/nzje/index.php">http://www.nzes.org.nz/nzje/index.php</a>. At the time of writing (10 July 2004), the site contains webpages for all articles of both the NZJE and ProcNZES (containing full citation information and abstracts/keywords for every article). You can currently download any article of all issues of the NZJE (volumes 1-8 still lack figures, and a few of the more recent issues need their figures cleaned and compacted to make smaller files; note that access to issues <3 years old is currently restricted to institutional subscribers). The draft site has been running since early June 2004, and already searches from the main Google website (<a href="http://www.google.com">http://www.google.com</a> are bringing up links to text inside our article PDFs.

A few early Proceedings are up on the site, but most remain half-constructed from the scans in my iBook. The site now includes full-text Google searching, but a more elaborate search engine (e.g., author search, title search) is still to be added. The *Occasional Publications* are not yet on the site (they also wait, full-text but without figures, in my iBook). We have been building a "how-to" manual of instructions while we worked through this project. This will be available on the website as a resource for other societies who wish to add back-issues of their journals to their website (and learn from our mistakes!).

The project has involved purchasing (and fixing) electronic copies of volumes 18–present from our publisher SwiftPrint (several earlier issues lacked figures), and scanning and reconstructing all earlier back-issues. All *NZJE* articles have been reconstructed from computer-read text generated from the scans. The scanning, proof-reading, and figure-insertion have all proved to be laborious tasks, but I hope you'll agree that the end products well justify the effort. This method has the advantage of producing very small, quickly downloadable files, with accurate, searchable full text. This outweighs the disadvantage of possibly missing the occasional computer typo in our proof-reading (and please report any typos you find so we can correct them).

The typesetting on many of the issues of the earlier *Proceedings* proved to be too inaccurate to make sensible computer-read text files, so full-text electronic reconstruction of the Proceedings was abandoned. Instead, we decided to make computer screen-resolution image-based PDF files of the *Proceedings*, with an underlying hidden layer of searchable (but error-filled) computer-read text. These files are larger and slower to download than the *NZJE* files.

We have also had to type in/computer-read the citation information (including the abstracts or first paragraphs) for all *Proceedings* and a minority of the *NZJE* articles. The rest of the citation information for *NZJE* was available from other sources, but this had to be edited substantially for missing content, typos, and formatting. This citation data is now provided for each article on the website, and can also be searched.

The Society now pays the Royal Society a very reasonable \$300 a year for the use of enough space on their server to host our greatly enlarged website. The Royal Society web server also offers a number of excellent open-source web tools (CPanel, PHP, mySQL, @nzes.org.nz emails), which I have incorporated into the site over the past year. We appreciate the Royal Society offering us this excellent service.

As part of this project, the *NZJE* webpages on the website have been rebuilt using web technologies, PHP and mySQL, which can create webpages dynamically from a database of citation information held on the server. This allowed for fast creation of all the article webpages (i.e., I didn't have to create each of the >1,000 webpages separately!!). This will also make future expansion and modification of the site much quicker. The next step will be to move other data-rich parts of the website to these technologies, beginning with *HotScience*.

All issues >3 years old are publicly available at no charge. And anyone can search all issues, including the latest issues. The NZES Council has decided for the interim to restrict downloading articles from the latest NZJE issues to institutional members. This function-

ality is now built into the website, and institutional members are being contacted for their network details. Already, anyone on a computer at Landcare Research, DOC, Lincoln University, and Canterbury University can download the latest *NZJE* issues from the website. If there is demand from individual members, we can incorporate a username/password access system so members can also access these latest issues. For example, these passwords could be distributed once a year with newsletters. Managing the distribution of usernames and password is unlikely to be a trivial amount of work, so a strong signal from the membership will be needed to make this happen.

We secured some additional money from TFBIS to print off posters advertising the new site. These will hopefully be available in time for the Invercargill conference.

The other notable new developments on the website over the past year has been the inclusion of the 2004 NZES Conference webpages on the main NZES site, and the addition of a password-protected Council area on the site. This conference pages included use of web-based submission of conference abstracts. Hopefully none of you had problems using this. The Council webpages archive past council meeting minutes and other documents related to the running of the society.

#### Still to come

Other developments to the website were put on hold over the last year due to the substantial amount of work required to expand the *NZJE* webpages. Planned for the year ahead is the further development of the *HotScience* service, and possibly an on-line membership service (join the society, pay your subs, update your postal address, etc.). And anything is possible. For example, do student members want an area of the site to communicate with each other? As always, suggestions for improvement are welcome (as would be any volunteer(s) who want to help grow this open-source website, e.g., a web savvy student who would like to manage a student area on the site).

Jon Sullivan

(webmaster@nzes.org.nz)

Jon deserves a huge thank you from NZES for successfully undertaking this Herculean task. The product his team has come is of an extremely high standard, and having full text-searchable articles back to Issue 1 offers the society much better access than anything else I have seen, and will be much superior to image-based PDFs used in most other sites including the Royal Society journal archives that are currently being built – editor.

#### **AWARDS CONVENOR'S REPORT**

There were no nominations during 2003 for the **Te Tohu Taiao** award and consequently, this award was not presented. This award is usually presented annually and recognises society members who have made an outstanding contribution to the study and application of ecological science. Members are encouraged to nominate colleagues that they consider are suitable recipients of the award.

There were only a small number of nominations for the **Best Publication by a New Researcher Award** in 2003 and it was decided by the NZES Council that an award would not be made until 2004.

The annual award for **Best Student Oral Presentation** was awarded to **Harshi Gamage**, from Victoria University for her paper titled "Leaf anatomy and stomatal conductance: Do foliar responses determine the shade-tolerance of homoblastic and heteroblastic seedlings?" **Jenny Lux**, University of Auckland received the award for **Best Student Poster** entitled "Early Polynesian burning and vegetation change at Waipoua Forest, Northland, New Zealand".

Many thanks to the judges of the student awards who as usual did a fine job. The standard of the student talks was excellent, and thanks to all of the participants that put considerable time and effort into their talks and posters.

Alison Evans

#### **OBITUARY - GEOFF BAYLIS**

Emeritus Professor Geoffrey Thomas Sandford Baylis FRSNZ 1913-2003.



Professor Baylis was a foundation member of the New Zealand Ecological Society and one of its most dedicated supporters. Geoff was the University of Otago's first Professor of Botany and Head of the Department for 34 years, from 1945 until his retirement in 1978. He passed away peacefully in Auckland on New Year's Eve, little more than a month after celebrating his 90th birthday with his family and many of his friends, including several of us from Dunedin. Born in Palmerston North and educated at Takapuna Grammar, Geoff developed an early interest in field botany which he pursued with a scholarship to Auckland University. He graduated MSc in 1935 with first class honours, researching the ecological morphology of mangroves. Another scholarship took him to London's Imperial College and, after graduating PhD in 1938 he returned and took up a position at Lincoln, as field crop mycologist in DSIR's Plant Diseases Division. Distinguished service in the Royal Navy during second World War intervened before taking up a position as Botany Lecturer-in-Charge at Otago University, replacing distinguished botanist John E. Holloway FRS, a name well known in ecological circles here, for two further generations.

As well as his ground-breaking mycorrhizal research with a range of indigenous tree species, Geoff also supervised an impressive group of mycologists. He also fostered his deep and abiding interest in ecology in several ways: initiating long-term ecological studies on the Three Kings Islands in the far north (where he made several first records) and Secretary Island and nearby areas in the rugged south-west; as a foundation member of the Fiordland National Park Board; a

member of the Forest Service's Scientific Co-ordinating Committee for Beech Research; and as Chair of the Protected Areas Scientific Advisory Committee. Geoff also initiated field ecological research studies and student supervision at Otago University, a tradition which has now become well established here. Peter Wardle and I were two of Geoff's early protégés in this field. Geoff was deeply involved in the establishment and early direction of the Hellaby Indigenous Grasslands Research Trust, on which he served as a Governor for 42 years, 33 as its Chair.



Geoff Baylis posing with recent deer damage to snow tussock grassland, Secretary Island, Fiordland. February, 1975. Photo Alan Mark.

Geoff's many significant contributions to ecological and plant science were recognised with a Fellowship of the Royal Society of New Zealand in 1961, appointment as the Society's Cockayne Lecturer in 1971 and recipient of its Hutton Medal in 1994 for his "contributions to research in the plant sciences." The proceedings of Geoff's retirement seminar were published in the 1979 Annual Journal of the Royal N.Z. Institute of Horticulture. The June 2004 Newsletter (No.76) of the N.Z. Botanical Society carries summaries of the ten more botanical presentations among the 19 offered at a special Gathering in Dunedin, in March 2004, attended by some 120 friends, colleagues and family, to 'Celebrate the life and achievements of Geoff Baylis, FRSNZ.

Professor Alan Mark.

#### **OBITUARY – MAVIS DAVIDSON**



Mavis Melville Davidson (nee Gedye). Ecologist, tramper and mountaineer. b. 10 Feb 1910; m. to William Earnest Davidson 1939 (d. 1990); d. at Leigh, North Auckland, May 27 2004.

Mavis blazed trails almost throughout her life. Born at Te Karaka, she attended Gisborne Primary School, Wairoa Secondary school and college in Auckland. She began her working life in an office in Wellington, then in the late 1930s set her sights on a degree in Zoology at Victoria University College, Wellington. This was interrupted by four years of military service in the Women's Royal Army Corps as a subaltern. She then returned to "Vic" to finish her Masters in Zoology and taught in the Department for several years.

She then turned her attention to one of the most contentious of possible career paths of the late 1950s for either women or men, when she joined the NZ Forest Service's Animal Research Section of Forest Research Institute to work on the then "noxious animals". She participated in a survey of deer damage in the Tararua Range, and carried out pen trials on possums with the then novel poison, "1080". Much of what followed was built on what she and Ralph Kean discovered during those few years.

In 1963 she submitted proposals for work on sika deer, the top priority for research on ungulates in the North Island. We all admired her tenacity at the time. She was 53, an age when most of us would be angling to spend more time in the laboratory. She decided to work in the sika heartland of the Kaimanawa and Kaweka Ranges o f Central North Island. Thus began the long task of unravelling their natural history, their impact on the bush, their interactions and hybridisation with red deer and possible strategies for their control. Even after she retired in 1975 and moved with Bill to Leigh, she kept working on her beloved sika and writing for journals in NZ and Europe.

Her other great love was tramping and mountaineering. Women were spurned as "serious" or capable climbers during her post-war years. She was not invited or permitted to go on tougher NZ Alpine Club or Tararua Tramping Club trips in the Southern Alps. The blokes didn't want to be saddled with a mere woman. So she organised her own parties and trips, culminating in 1953 with leading the first all-women climb of Mt Cook. She followed that with an all-women climb on Mt Aspiring and another on Mt Avalanche. In 1971 she walked with a party to the base of Mt Everest. She found it uncomfortably civilised, with stone dwellings up to 17,000 feet.

She was: a Member of the New Zealand Ecological Society; a Fellow of the NZ Institute of Foresters; a Life Member of NZ Alpine Club for services to mountaineering; Holder of the Gold Badge of Honour of Internationale Gesselschaft Sikawild for research on sika deer; Forest Research Institute Jubilee Award winner as "Pioneer" in her field, and; the award she cherished most, an OBE in 1992 for services to science and mountaineering.

She bore the burdens of advancing age with stoicism. Her husband Bill fell prey to Alzheimer's disease and Mavis nursed him for several years. She lost a leg above the knee to amputation about five years ago. Then just a couple of months ago when it seemed that her other leg would also have to be amputated, Mavis said to her friends and admirers that she had had enough, and she died peacefully a few days later in their company.

C.L. (Les) Batcheler.

#### **HOTSCIENCE**

Stewart, G.H.; Ignatieva, M.E.; Meurk, C.D.; Earl, R.D. 2004. The re-emergence of indigenous forest in an urban environment, Christchurch, New Zealand. *Urban Forestry & Urban Greening* 2: 149-158.

In this article we examine the indigenous and exotic shrub and tree components of the Christchurch flora as planted street trees, in domestic gardens, and in parks. We also present data on tree and shrub regeneration in parks and domestic gardens in the city. Indications are that the more sensitive, less intrusive management of urban enviornments, combined with the greater density of indigenous seded sources, has already allowed regeneration of a wide range of indigenous species across a broad spectrum of habitats - from neglected gardens to pavement cracks to exotic plantations. If present trends continue through appropriate management and facilitation, native forest regeneration should proliferate into a sustainable mixed origin urban forest that resurrects and preserves the natural character of the region.

#### **UPCOMING MEETINGS**

#### Making Connections: Cross-boundary Coastal Management, the 2004 Annual Conference of the New Zealand Coastal Society

18-20 October 2004, Dunedin.

On behalf of the New Zealand Coastal Society Management Committee and the 2004 Conference Organising Committee, it is my pleasure to invite you to join us in Dunedin in October for the Society's annual conference.

We have planned a full 3-day programme of social events, local and regional field trips, presentations and focused workshops. The conference theme aims to encourage the consideration of integrated coastal management, in all its manifestations. In addition, we are holding four workshops on issues and subjects of current interest:

- (1) State of the coast environment reporting and coastal monitoring;
- (2) Coastal hazard management;
- (3) Regional coastal plans and aquaculture management areas; and
- (4) Port operations and coastal communities.

The organising committee have arranged an exciting programme of plenary presentations from local and overseas speakers, including Prof Paul Komar (Washington State University), Prof Nick Harvey (Adelaide University) and Dr Liana McManus (Chair, Scientific Steering Committee of LOICZ).

We are also convening a special, day-long, workshop on the impact of major dams, diversions and water abstraction on coastal sedimentation in New Zealand. This is a major issue in New Zealand and one which fits well with the theme of the NZCS conference. The workshop will examine our understanding of catchment to coast sediment transport and the impact of dams and water abstraction on coasts. The workshop is being organised with the support of the Royal Society of New Zealand (IGBP Committee) and LOICZ (Land-Ocean Interactions in the Coastal Zone). Visit the LOICZ website to learn more of this major international coastal agency (http://wwwold.nioz.nl/loicz/). This workshop will entail morning presentations from international and local speakers, followed by a field trip to the coasts of North Otago, Oamaru and the Waitaki Delta.

In keeping with the traditions of NZCS conferences we will provide ample opportunities for social interaction. The conference dinner will be held at Larnach Castle; we will be holding a cocktail evening in the Southern Lands Gallery of the Otago Museum and organising other social events.

We invite the coastal community to register for the conference and consider offering workshop (10 minute) or plenary (30 minute) papers, or posters, on the conference and workshop themes. Please visit the conference website for registration information. Delegates registering by the 31 August will receive a 10% discount on their registrations. Those offering papers or posters should register by 31 August.

Conference places are limited to 150. Email Miss Julia Laming (<a href="mailto:lamju985@student.otago.ac.nz">lamju985@student.otago.ac.nz</a>) or visit <a href="mailto:http://www.coastalsociety.org.nz/conference2004.htm">http://www.coastalsociety.org.nz/conference2004.htm</a>

#### **MEETINGS DIARY**

New entries are marked with an asterisk.

#### 10-11 August, 2004

6th New Zealand Natural Hazards Management Conference

Taupo. Contact Diane Tilyard, <u>d.tilyard@gns.cri.nz</u>, <u>http://www.gns.cri.nz/news/conferences</u>

#### 10-13 August 2004

"Forest diversity and resistance to native and exotic pest insects", The International Union of Forestry Research Organisations (IUFRO) Conference Hanmer Springs, Canterbury. http://iufro.boku.ac.at/iufro/iufronet/d7/wu70307/nz/

#### 29 August - 2 September, 2004

NZES Annual Conference, Invercargill.

#### 31 August - 3 September, 2004

7th International River Management Symposium Brisbane. Contact Glenn MacRae, <u>glenn@riverfestival.com.au</u>, <u>http://www.riverfestival.com.au</u>

#### \* 4-9 September, 2004

8th International Global Atmospheric Chemistry (IGAC) Conference

Christchurch. <a href="mailto:trish@conference.co.nz">trish@conference.co.nz</a>, <a href="http://www.IGAConference2004.co.nz">http://www.IGAConference2004.co.nz</a>

#### 5-8 September, 2004

International Conference on Bioinformatics Auckland. See <a href="http://www.incob.org">http://www.incob.org</a>.

#### 15-18 September, 2004

Practical Applications of Ecological Theory and Modelling, Dr Nigel Barlow Symposium

Queenstown. Contact John Parkes,

Parkesj@landcareresearch.co.nz,

http://www.improvedbiosecurity.org/BarlowSymp/
Welcome.htm

#### \*15-19 September, 2004

3rd International Conference on Chemical Bioavailability in the Terrestrial Environment Megharaj.Mallavarapu@unisa.edu.au; and Contaminated Site Remediation gary.owens@unisa.edu.au, Adelaide; http://www.cerar.com.

#### 30 September – 6 October, 2004

NZ Water and Wastes Assn 46th Annual Conference & Expo

Wellington. Contact <a href="mailto:events@nzwwa.org.nz">events@nzwwa.org.nz</a>, <a href="http://www.nzwwa.org.nz">http://www.nzwwa.org.nz</a>

#### \* 18-20 October, 2004

Making Connections: Cross-boundary Coastal Management, the 2004 Annual Conference of the New Zealand Coastal Society

Contact Julia Laming (<u>lamju985@student.otago.ac.nz</u>), <u>http://www.coastalsociety.org.nz/conference2004.</u> htm

#### 19-21 October, 2004

New Zealand Grassland Association Annual Conference

Methven. Contact <u>mail@grassland.org.nz</u>, <u>http://www.grassland.org.nz</u>

#### 14-19 November, 2004

11th International Conference on Harmful Algae Cape Town, South Africa. <a href="http://www.botany.uwc.ac.za/pssa/hab2004">http://www.botany.uwc.ac.za/pssa/hab2004</a>

#### 22-26 November, 2004

DNA Technology Workshop

*Palmerston North*. <a href="http://imbs.massey.ac.nz/workshop.">http://imbs.massey.ac.nz/workshop.</a> <a href="http://imbs.massey.ac.nz/workshop.">httm</a>

#### 28 November – 1 December, 2004

14th annual Queenstown Molecular Biology meeting, Molecular Mechanisms in Cell Biology

Queenstown. Contact <u>julian.eaton-rye@stonebow.</u> <u>otago.ac.nz</u>, <u>http://www.qmb.org.nz</u>

## **NEWS FROM COUNCIL**

Editor's Note (Edited and abridged minutes)

# Minutes of NZES council meeting, 21 May 2004.

## Correspondence

The Royal Society NZ asked for a nominee to attend a MORST conference in Noumea. Royal Society meeting of constituent organisations: Murray Williams will attend as NZES rep.

John Parkes (Nigel Barlow Memorial Symposium). John wants to formally request a special issue of the *NZJE* to publish papers with a NZ focus. 10-15 papers (\$10-15k) is available to publish the issue, but given the large number of Barlow papers, will Society help contribute some more? Dave—previous requests for special issues have put a squeeze on remaining space in the journal for other papers so any future ones need to be self funding and be published as a "special issue". Duane: will approach John Parkes to clarify what commitment he wants from the Society. Mark: write

to John to say we are encouraging the special issue and agree in principle etc. He will run it past Council for comment.

#### Membership

Rachel—NZES has received a request for overseas unwaged membership rate. Dave—one does not apply currently but we could set up if wanted to. It is best to check with the Secretariat to first check if they have the capacity to record another membership category. If the Secretariat agrees, the rules can change so that the membership categories are not individually stated. See motion in Newsletter 109 to be put at the AGM.

#### Treasurer

Rachel—circulated the updated cashflow. Rachel and accountant has set up a new system to track entries using electronic templates set up by the accountant she paid to help her. A new "journal online" (TIFBIS money) entry has been created. Mark—is it worth having some kind of projection for cashflow? Rachel has already started that essentially. Dave—Rachel needs to know how much to put on term deposit.

#### Journal Editor's Report

Richard Duncan has completed Vol. 28(2), which has 14 papers and is currently in Jenny's hands (completed March 2004). Vol. 29(1) has three papers accepted to date. 10 papers had been submitted to the journal by 19 May 2004, a substantially slower rate of submission than in 2003. A complaint was received about missing pages in some copies of volume 27.

Some discussion was held on the publishing format used currently and whether cheaper publishing options were available. The offset printing we use is expensive but has high quality. A4 may be a more appropriate page size. The council needs to decide by September 2004 on a change of format for next year or we will have to wait until 2006.

Mike Rudge has prepared an obituary for John Gibb to appear in Vol 28/2.

#### Webmaster

The website is increasing in popularity with the journal, conference, and meetings webpages the most popular parts of the sites. The TFBIS project still continues. Once the journal catalogues are online, the exposure of the journal will increase (all papers except the last 3 years back to 1973 will be online). Has received advice from Richard Bacon who has assisted Jon with the PDFs. The NZ Entomological Society has also secured TFBIS funds and these will be as compatible with NZES as much as possible.

Dave—Once it is ready we need to send a letter to libraries relaying that if they subscribe, there will be online journal as well and we will secure more library subscriptions.

#### Newsletter

Alastair will retire as newsletter editor after the conference. A new editor will be required to do last newsletter at end of year (#111).

#### Awards

Alison—has drafted out responsibilities of the Awards Convenor so a new person can have something to learn from. Alison has templates for awards and she will get information on what students are registered for the conference and will contact appropriate people for judging them at conference. No students can present in the last session because of the pressures of judging.

There are a number of Academy medals available for nomination for the Royal Society due 2 August, this information could be put on the web list server. It does take a lot of time and energy to find nominees. Our website has list of previous society awards. We really need a list of what medals are available each year with a list of people who have received them in the past to reduce the effort of the process of nomination.

#### Conference 2004

Kate—everything is on track and outlined the planned symposia and fieldtrips. Circulated a budget and explained how the registration costs have been arrived at, based on worse case scenarios. Some sponsorship has been arranged and Royal Society UK will place pamphlets in the registration packs. The registration form is ready to be put into the newsletter. The registration process is being handled by Environment Southland.

Rachel gave advice on how to handle payment for goods and services associated with the conference through a bank account. Abstracts will be accepted online through the web form that Jon has created.

Judith Roper Lindsay from Boffa Miskell is facilitating a workshop on significant natural areas. Boffa Miskell will be co-authors on any publication resulting from the workshop and the workshop will be sponsored by Boffa Miskell.

#### Conference 2005

Mark—both EcolSoc and Lim Soc have agreed in principle to a joint conference in 2005 but we need someone to organise it. John—there is an International gathering for 100th Anniversary for first publication of NZ flora, that could clash in Nov 2005.

#### General Business

Alison—wrote a draft letter to Bruce Burns and Murray Williams to thank them for their for involvement in Kauri Fund.

The next meeting is 29 August at the DOC office in Invercargill, 2p.m.

# ECOLSOC E-MAIL LIST SERVER AND WEB PAGE

#### **Ecolsoc E-mail**

To subscribe to this server, send a message to the automatic Mailserv processor at:

nzecosoc-request@its.canterbury.ac.nz

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

#### SUBSCRIBE NZECOSOC

END

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

#### UNSUBSCRIBE NZECOSOC

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

PLEASE KEEP THESE INSTRUCTIONS AND FOLLOW THEM.

To send a message to anybody on the list, even if you are not a subscriber, use the address: <a href="mailto:nzecosoc@its.canterbury.ac.nz">nzecosoc@its.canterbury.ac.nz</a>

To reply you have two options. You can either hit reply and this will reply to **everybody**, or you can reply to the author only (e.g., a new e-mail with the author's personal e-mail address).

For information on the listserver contact the newsletter editor (<u>A.W.Robertson@massey.ac.nz</u>) or me at <u>d.kelly@botn.canterbury.ac.nz</u>. For information on the Australian listserver contact Dave Kelly.

#### Web page

To obtain additional details contact the NZ Ecological Society website: <a href="http://www.nzes.org.nz">http://www.nzes.org.nz</a>. This site has membership details, information on awards and prizes, information on submitting papers to the journal and links to overseas ecological organisations.

## Office Holders of the New Zealand Ecological Society 2003/2004

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

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This Newsletter was produced by Alastair Robertson and Jeremy Rolfe.

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

Alastair Robertson Ecology, Institute of Natural Resources Fax: 06-350-5623

Private Bag 11222 Massey University

Ph: 06-350-5799 extn 7965

E-mail: A.W.Robertson@massey.ac.nz

#### Next deadline for the newsletter is 30 September 2004.

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

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Mew Zealand Ecological Society (Inc.) P.O. Box 25-178 CHRISTCHURCH

## **MEMBERSHIP**

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

# Types of Membership and Subscription Rates (2003/04)

Joint \$75\* per annum

Overseas \$95\* per annum

Joint members get one copy of the journal and newsletter to one address.

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

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

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

For more details on membership please write to:

NZ Ecological Society PO Box 25 178 Christchurch NEW ZEALAND

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

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