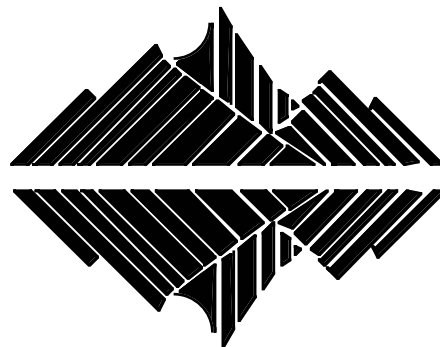


# Ecological Society

# Newsletter



No. 92, August 1999

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

## MINUTES OF THE 47TH ANNUAL GENERAL MEETING OF THE NEW ZEALAND ECOLOGICAL SOCIETY

**Wednesday 30 June 1999, Blenheim Country  
Lodge, Blenheim**

*Started 6:24 pm*

Present: Craig Miller (Chair), Dave Kelly (secretary), 31 other members and one observer.

The meeting began with one minutes' silence as a mark of respect for longtime member John Holloway, who died earlier this year.

### 1. Apologies

Apologies were received from: John Hunt, John Parkes, Vicky Froude, David Norton, Judith Roper-Lindsay, Colin O'Donnell, Astrid Dijkgraaf, Jason Roxburgh.

### 2. Minutes of the 46th Annual AGM

It was moved the minutes of the 46th annual AGM be accepted as a true and correct record

### 3. Matters Arising

#### *Code of Ethics*

Discussion on progress; there has been little as the Code got bound up with Professional Body discussions which are still proceeding. Various suggestions voiced including using the Royal Society of NZ Code of Ethics as Draft ethics. Publish this in the next newsletter (See item later this issue) and ask for comments through various media including the email list server. Concerns raised about internal agreement and how to police a Code if we adopt one.

### 4. Annual Reports

Craig Miller spoke to his written President's report, which was circulated at the meeting and published in this issue.

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Dave Kelly (Secretary) spoke to his review of the finances, membership etc of NZES over the last 10 years. His report is also included in this issue.

There was wide discussion regarding the finances and how much the Society should keep in reserve. This led to a motion that the Society set a prudent level of cash reserves at one year's expenditure. Dave asked for a show of hands to gauge the feeling of the meeting. The motion was carried with 25 in favour and 2 opposed.

Dave then presented the Treasurer's report including the unaudited accounts for 1998/99 and proposed budget for 1999/00 (See Treasurer's report this issue). At first glance these look healthy with a profit of \$11,000. However most of this is due to profits from the Dunedin conference and Ecotoxicology workshop. Moreover, much of that money is effectively already committed to be spent next year. The Ecotoxicology workshop proceedings are coming out as the second issue of NZJecol this year, and page charges have been waived for that issue, costing c \$1800. Also, the issue will be fatter, adding another \$5000 to printing costs. Council has already decided to proceed with that cost, which uses up nearly \$7000 of this year's profit (ie all the net profit from the workshop). Finally, the backlog of papers accepted for NZJecol caused by the special ecotoxicology issue have led to a request to print more pages in the first issue in 2000. This would add an extra \$5000 or so to next year's budget expenditure, without any clear way of paying for this. Dave asked whether members were happy for Council to approve this expenditure from reserves. There was support for this, although it was pointed out that running down the reserves in this way ran counter to the previous motion about building up reserves to one year's expenditure.

Susan Timmins moved that the meeting supported the extra expenditure on journal pages, seconded John Craig, carried.

John Craig said that, in future, workshops like the Ecotoxicology one should be fully self funding. Dave replied that it largely was, but that there was a profit that appeared in the books for a while before going to cover downstream costs. This meant that NZES appeared to have a profit which in fact was already committed. The other implication of the workshop was the backlog in the journal which caused extra expenditure, but Council had resolved at its last meeting not to use any future normal issues of the journal for such special issues. In future they would be published as additional self-funded issues (number 3 for the year), or as Occasional Publications.

Neil Deans said that the Council needed to clearly separate one-off payments from long term

income. It was agreed that Council needed to develop a longer term plan for expenditure and income, and the reserves policy should be part of this. Dave said council had decided to delegate some councillors to try and increase membership and subscriptions, both of which had fallen over the 1990s. This would increase income.

Alastair Robertson asked why bad debt was set to zero in the accounts. Dave said he thought we were taking a more cautious approach to entering unpaid debts as assets, reducing the need to later write them off if unpaid.

### 5. Election of Officers

The following people were nominated for named positions; President, Carol West, Vice-President, Janet Wilmshurst, Secretary, Dave Kelly, Treasurer, Colin O'Donnell. As there was only one nomination for each of these positions the candidates were declared elected, with applause.

Ben Reddiex, and Bruce Burns roll over as councillors, leaving two vacancies. There were three nominations: James Ross, Mark Sanders and Jaqueline Beggs. An election was therefor held and Mark Sanders and Jaqueline Beggs were declared elected to Council.

The journal editor (David Wardle), Newsletter editor (Astrid Dijkgraaf), and Submissions convenor (Jason Roxburgh) are all willing to continue in those posts and are *ex officio* members of Council.

### 6. General Business

#### *Life membership*

Council proposed life membership be awarded to Peter Wardle for his long service to NZES and to ecology in New Zealand. This was passed unanimously.

#### *50th anniversary of NZES*

Wren pointed out this happens in 2001 and we should be planning for it now. There was some uncertainty about the exact year of formation of NZES. Carolyn Mason said the minutes of the first meeting are in the Canterbury Museum; she would check these. As this is the 47th AGM that might suggest we turn 50 in 2003, but there may have been years with no AGM. Wren moved that Council initiate planning, seconded Alan Mark, passed. Bruce McKinley volunteered to help with this.

#### *Conference timing*

Dave asked whether midyear (June/July) or August/September was a better time for conferences. There was an overwhelming preference for August. Next year's conference is in the week starting 28 August in Hamilton. Alastair Robertson pointed out that if the venue was going to be a university, in that year August may not be an option.

#### *Votes of thanks*

Bruce Burns moved a vote of thanks to retiring council members Craig Miller, Wren Green and Judith Roper-Lindsay. Seconded Alan Mark, carried.

## NOTES FROM COUNCIL

*Tuesday 29 June 1999, 5:30pm, Blenheim (during annual conference)*

### Web page

Approved to set up. The last holdup was registering the address ([www.nzes.org.nz](http://www.nzes.org.nz)). The site is now live.

### Journal

Next issue is Ecotoxicology discussion on how many extra issues required and how much that would cost. Problem is that the one-off issues block up the normal flow, cause delays in the journal. Council **agreed** that special issues should be additional to the two issues a year.

Next issue next year: to clear the backlog, if we print 50% more, how do we pay for the extra? Discussion on how to increase income generally. Incoming council to consider preferably as part of a 5 year plan for subs, marketing, membership, etc.

### Correspondence

Not much of significance. No sign of information about IUCN that Wren thinks we should have got.

### Awards

Approved life membership for Peter Wardle (includes contributions to ecology and to NZES). We have had few life members made in the 1990s. Procedure is for council to present a nomination to the AGM which is then approved by the AGM if they see fit.

NZES award: should emphasise last two years' work. Need more information in the newsletter before the next round, stressing the "recent achievement" element. In the past we have tended to focus on lifetime achievement which was not the original intent.

### Treasurers Report

Discussed, see AGM minutes or report this issue

### Editors report

David W and Janet have been looking at changing the style around a little (more normal layout, better use of space). Probably from issue 24 (1). No extra cost. Asked Caxton Press for a quote for two colour flier advertising the journal. This could then be sent out; we could offer an inducement to new library subscribers such as free back copies. Dave has had zero success in selling any of the back issues he brought to the conference.

ANZCCART recommend we adopt a policy on animal ethics; it seems fair enough so David recommends we adopt it and print this in Instructions to Authors.

Discussed the big issue next year, agreed we should try to find the money for the extra pages but want a definite budget for this.

## Other Conferences

### *NZES conf. 2000*

Midyear date as used in the last few years is bad for CRIs/consultants (Willie Shaw), but the next meeting is already planned to be in late August (week starting 28 August).

### *Southern Connections III, Chch Jan 2000*

NZES to co-sponsor: help with information, newsletter, encouraging people to help, but no money.

### General business

It seems we should make a bigger difference between conference fees for members and non-members – to encourage people to actually become or stay members. We seem to have a lot of non-members coming these days.

IUCN – Council needs a second person at the meetings so Wren can represent regional interests and someone else can represent NZES. Maybe a Wellington volunteer?

### Next meetings

July 30, November 26, February 18 2000, May 19, Aug 27 or 28 at conference, AGM at conference

Due to lack of space and time the annual reports could not be published in the issue prior to the conference, thus they are reproduced here for those members who did not attend the AGM. The Journal editors report was published in the last newsletter.

## PRESIDENT'S REPORT

*For the year from 1 December 1998 to 29 June 1999.*

It has been a short year for the New Zealand Ecological Society, following on from the successful conference and AGM held in Dunedin, in November 1998. Despite the time frame your Council has been quite busy and has notched up a number of achievements on your behalf.

The New Zealand Ecological Society will soon have its own web page on the internet. It became apparent to council that if the Society was to have greater national and international exposure then we needed to make use of the Internet. The President of the Ecological Society of Australia commented to me that he had searched for us on the web, from his office in Perth, prior to our joint conference. Obviously we weren't there and he, and many of the Australian delegates, wondered why.

But now we are, and it is with credit to the efforts of Ben Reddiex, Bruce Burns, and Astrid Dijkgraaf. The address is [www.nzes.org.nz](http://www.nzes.org.nz) and the site will contain information about the Society and its journal (possibly including abstracts of papers)

and of course a membership form. Please do check it out, but remember that it is still under development and will be improved as time goes on.

I am pleased to report that the Society has been accepted as a NGO member of the International Union for the Conservation of Nature. Apparently we are the first New Zealand scientific body to do this. We look forward to providing benefits to our members from this, and providing scientific input into the work of the IUCN in New Zealand and the Pacific. We intend to have either a Council member or an ex officio member as our representative at their meetings in Wellington.

It is also a pleasure to welcome our new journal editor, Dr David Wardle. David takes over as editor from Dr Gábor Lövei, who moved to Denmark last year. Council was spoilt for choice in having two eminently suitable applicants for the position. The choice was difficult, but it was with some satisfaction that we appointed David for a period of five years. David has an enviable scientific record and I know that he will do the journal justice.

Council thanks Gábor for his efforts with the journal, and also acknowledges the efforts of Dr John Parkes. John acted as interim editor during the period when council was seeking a new editor. This service is typical of John, and further justifies the award of life membership of the Society.

In 1998 Ian Atkinson resigned as the Society's representative on the JS Watson Conservation Trust. Mary McEwen has replaced him. This trust is administered by the Royal Forest and Bird Protection Society and funds numerous conservation projects. I know that many graduate students have had their research supported by this trust. We thank Mary for taking on this responsibility.

Council has established a sub-committee to work on the establishment of a Professional Institute of ecology. This has been the perennial hoary chestnut and has surfaced and sunk many times over the last two decades. We believe that the time is right for such an institute, particularly with the increase in the number of professional ecologists plying their trade. It will happen.

Recently Council has been in the unfortunate position of having to strike 18 members off the books for failing to pay their subs for a period of two years. This resulted in the writing off of \$1790 in back membership dues. I am forced to remind members that, should you no longer wish to belong to the society, it is not enough to cease payment. You have an obligation to officially resign. Council accepts these resignations with regret, and is then able to remove your name from the membership list. It also means that we don't have to keep sending out

newsletters and journals to people who don't want them!

On a brighter note the Society's conferences since 1994 have been turning a healthy profit – and I don't believe that this is a consequence of high prices or sub-standard service, and not because we are a profit making organisation. Rather it reflects the interest of members in attending these conferences, over and above our expectations. So what to do with this profit? The issue of developing a reserves policy was raised at the last AGM, and council has been working on it.

There is a need to maintain a certain level of reserve in order to keep the Society and its journal functioning. As to the rest, it needs to be turned to promoting the study of ecology. The Treasurer is working on a draft policy and I anticipate that this will be brought to members. Without prejudicing the ability of the new Council to make decisions I propose that Council consult the members.

Every year the New Zealand Ecological Society makes submissions on issues of national or regional importance that require an ecological input. Two key issues this year have been the proposals to amend the Resource Management Act and the Biodiversity Strategy. Judith Roper-Lindsay wrote our submission to the Ministry for the Environment on the Resource Management Act proposals. As a society we wanted to ensure that the intent of the Act, i.e. section 5 in particular, but also including sections 6 and 7, was not watered down in any way. We did however support proposals to make the act easier to work with.

When submissions were called for the Biodiversity Strategy our submissions convenor, with the support of council, decided to invite all members to contribute. Members were asked to send in any comments that they had, large or small. This was because the strategy is or should be of singular concern to members. As it was only two people, apart from the submissions convenor and myself contributed. Thank you John Craig and John Parkes. The lesson for council is that we cannot rely on a voluntary approach to submissions. We either need to establish workshops as was done for the cultural materials submission, or identify one or two key people to drive a submission and target contributors.

Nevertheless I was incredibly disappointed in what appeared to be general apathy in members. Perhaps people were overworked – but then we all are, or they felt that their contribution wasn't worth anything – not true. Whatever the reason I would like to see a greater interest and involvement of members in the activities of the Society in the future.

Craig Miller, *President*

## MEMBERSHIP

As at 21 July 1999 the Society had 443 members: 6 Honorary members, 281 full members, and 156 unwaged members. (This excludes members who are 2 years in arrears with their membership). There were 107 subscribers to the Journal (43 in New Zealand, 64 overseas) plus 16 who receive complementary copies (Current Contents, etc).

## TREASURER'S REPORT

### 1 April 1998 - 31 March 1999

Shown below is the unaudited Income and Expenditure accounts for the Ecological Society for the 1998-99 financial year. All figures are ex-GST. The figures are ready for the Society's Auditor to evaluate.

The year has been good financially. We returned an excellent profit of \$11,141. This largely reflected profit from the very popular Ecotoxicology workshop (\$7,087) and the equally successful conference in Dunedin (\$3,547). The workshop was more popular than initially expected, resulting in greater than expected profit. Some of this money has been tagged by Council to encourage production of the workshop proceedings in the Journal and defraying page charges to authors. While this result is encouraging, core costs of the budget are still being held at a similar level to previous years. Income from membership, interest on investments, publications, journal subscriptions and reprints were up slightly. However, expenditure on the journal, administration, newsletters, Royal Society fees and the secretariat were also up slightly, while council expenses were down.

These figures indicate that any financial flexibility is dependent on additional income from other sources (e.g. workshops etc). The best way to increase our financial independence is by increasing subscription and membership levels. We are still in a better position financially than previously. The accounting system is much more transparent than it was. The early billing of subs means that we have a large proportion of our income arriving in the first couple of months of the financial year so we can plan and meet expenditure without any serious short falls. We have a much better system for tracking invoices and virtually no bad debts in the last couple of years.

Council is beginning to develop a policy for financial reserves. To this end we welcome any feedback and ideas on the targets we should set ourselves for reserves. Over the last ten years or so we have had profit and losses in particular years fluctuating between -\$14,000 and +\$11,000, largely

reflecting variations in timing of journal production. Although journal production is now on a firm timetable it would be prudent to hold reserves equivalent to either (1) the cost of one or (2) two issues of the journal or (3) the annual costs of running the Society (costs of ca. \$12,000, \$24,000 or \$45,000 respectively). In addition, there are several possibilities for the Society to use reserves so we can become more pro-active advocates for ecology, including setting up reserves or trusts to enable the Society to take on new initiatives. This could include setting up reserves from donations, building up reserves steadily through profits, or seeking grants. Funds could potentially be used for special purposes (e.g. research grants, travel grants etc).

### Proposed Budget 1999-2000

We are budgeting a loss because of increased costs of the journal related to producing the ecotoxicology workshop. We must generate income from the sales of the workshop proceedings to offset the increased costs this year.

INCOME	Actual 98/99 \$	Proposed 99/00 \$
Membership	23,904	25,000
Subscriptions	11,867	12,000
Reprints	3724	1800
Interest	841	900
Conference	3548	1500
Back issues	488	500
Workshops	7087	0
Sundry	317	0
<b>TOTAL</b>	<b>51,776</b>	<b>41,700</b>
EXPENDITURE		
Secretariat	7357	6900
Post & stationery	2245	2000
Audit	300	300
Council costs	2148	3000
Journal production	22,746	29,000
Royal Society sub	1111	1111
Newsletter	3821	3500
Awards	600	400
Sundry	308	800
<b>TOTAL</b>	<b>40,636</b>	<b>47,011</b>

All figure GST exclusive & Rounded to nearest \$.

Colin O'Donnell, *Treasurer*

## SUMMARY OF SUBMISSIONS CONVENOR ACTIVITIES SINCE 1998 ECOL SOC AGM

The year since the last AGM has been quiet for submissions, with only one major item on the agenda. The NZ Biodiversity Strategy was released for public comment, with submissions closing in May. The mere production of this Strategy is a major milestone for biodiversity protection in NZ, and this submission was a chance to have our say in getting the foundations set for biodiversity protection in the future. Many thanks to those few of you who did respond, but without your input it is impossible for me to produce something representing member's points of view.

As a result, the Society's submission on the Strategy was a bit thin, and only represented the roughly collective view of the half dozen or so people that responded. This also reflects badly on the Society as a body of professionals. I think the issue is more about how we get the message out to members, and having to emphasise more that the Society's as such doesn't have a "point of view", it is really the sum of the views of members. We need to develop a better means of letting you know what needs to be submitted on, and how you can best get your 12.5c worth (10 c plus GST) into the collective view.

We do have an E-mail message server, but it seems to have failed to pass the information on to most of you. The problem is being looked at. The newsletter doesn't come out often enough to give you enough time to think about particular submissions, but we do use it to let you know what is likely to be around in the near future. We also have a list of members' areas of interest (remember the section of your original membership form that asked you to indicate your areas of interest's) and I use this to target members with specific expert and experience in certain topics.

If you have suggestions on how we could improve our ability to disseminate and receive information on submissions, please let myself or one of the Councillors know.

One of the Society's main roles is to promote the use of ecological sciences in planning and decision making in New Zealand. One very effective way to do this is through professional, credible, and hard-hitting submissions that represent the views of ecologists throughout the country. **Those ecologists are you!**

Jason Roxburgh, *Submissions Convenor.*

## NEWSLETTER EDITOR'S REPORT

Since the conference in November 1998 two issues of the newsletter have been published, one in March and one in June, both issues were 16 pages in length. Topics were wide ranging and included many contributions from members. Wren Green has consistently contributed items on the aims and progress of issues within the IUCN, and I hope his enthusiasm will continue unabated. Dave Kelly's sterling efforts recording the committee proceedings have made my task considerably easier. I would like to thank Wren, Dave and all other contributors for making the newsletter an interesting and informative vehicle for ecological news and information. Please feel free to continue to send me items of interest, comments or personal opinions.

Astrid Dijkgraaf, *Newsletter Editor*

## CONVENOR OF AWARDS REPORT

Six awards were presented at the joint New Zealand Ecological Society and Ecological Society of Australia 1998 conference. Three awards were made for the **best student talk**. Recipients were: **Nick Bond**, University of Melbourne for his paper titled "Dispersal in heterogeneous environments: the importance of spatial pattern"; **Alison Evans**, Lincoln University for her paper titled "The impact of sustainable beech (*Nothofagus* spp.) harvest on litter-dwelling invertebrates and litter decomposition"; and **Paula Peters**, Monash University for her paper titled "Are herbivorous insects influenced by the leaf anatomy of their host plants?".

The prize for the **best student poster** went to **Angus Small**, University of Otago for his poster titled "Investigating causes of low reproductive success of takahe on offshore islands of New Zealand". The **Australian Flora Foundation student prize** went to **Merilyn Merrett**, Landcare Research, Hamilton for her poster titled "Taxonomy and ecology of *Alseuosmia quercifolia*".

**John Innes** of Landcare Research, Hamilton was the recipient of the 1998 **Ecological Society Award**. John is a long-standing member of the society, who has been a councillor and treasurer of the New Zealand Ecological Society, and has authored over 70 publications. Amongst other things, his recent research has investigated the ecology and control of rodents, and the ecology and management of New Zealand forest birds, especially North Island kokako.

A new award, the **New Zealand Ecological Society prize for the best paper by a new researcher** has been created this year. This annual award is for the best published paper of an ecological nature, by a young author, and is targeted at people at the start of their research career. Criteria for the award are outlined in the June 1999 Society newsletter and will be available on the NZES web site.

Ben Reddiex, *Awards Convenor*,

### AWARDS PRESENTED AT THE 1999 ECOLOGICAL SOCIETY CONFERENCE, BLENHEIM

At this years AGM the Society announced a special award – **Dr Peter Wardle** was awarded an honorary life membership to the Society. This award recognises Peter’s contribution to the Society and his contribution to New Zealand ecology in general. Peter has been a councillor, vice-president and president of the Society. In his research, Peter has made a number of major contributions to New Zealand plant ecology including a large number of refereed publications, completion of major reviews of alpine timberlines, alpine ecology and plant geography and publication of a comprehensive account of New Zealand vegetation (“Vegetation of New Zealand”). The award is certainly well deserved - congratulations Peter.

The 1999 New Zealand Ecological Society Award was awarded to **Dr Carloyn King**, University of Waikato. This award, which is made annually, recognises society members who have made an outstanding contribution to the study and application of ecological science. Carolyn has studied small mammals, especially weasels and stoats, for more than 20 years and has produced a raft of papers on stoat and weasel ecology and has authored several books. Carloyn has also made a substantial contribution to New Zealand ecology via her editing of the *Journal of the Royal Society* since 1983, the *New Zealand Journal of Zoology* since 1991 and the Oxford University Press book “The handbook of New Zealand mammals”. Congratulations Carolyn on receiving this prestigious award.

The annual award for best student oral presentation was jointly awarded to **Souzi McGill**, Lincoln University for her paper titled “Use of the gall fly to suppress Californian thistle in pea crops”, and **Deborah Wilson**, University of British Columbia for her paper titled “How much does predation affect lemming population dynamics?”. **Margaret Stanley**, Monash University received a highly commended award for her student paper titled

“Avian frugivory in an Australian eucalypt woodland”. Thanks to the judges, Dave Choquenot, Alastair Robertson, Dave Kelly and Frances Schmechel who had a difficult job as the standard of the student talks was excellent. The award for a highly commended poster by a student was awarded to **Ruby Jones**, Auckland University for her poster titled “Kokako translocation to Tiritiri”.

Ben Reddiex, *Awards Convenor*

### NEW ZEALAND ECOLOGICAL SOCIETY AT THE END OF THE DECADE (MILLENNIUM): A SUMMARY OF THE LAST 10 YEARS

This project got out of hand. I started to simply collate information on reserves and profits, so we could debate what was a prudent level of cash for the society to keep on hand. I kept finding more useful information, so here it is laid out for the benefits of members. There are several tables, and some explanatory notes.

#### Accounts, membership, subscribers

(Table 1)

##### *Money*

Wild swings in profit or loss through the 1990s, as we doubled the number of journals per year (1990) and later hired professional (and very very good) secretarial help (1995) with no real plan in either case of how we would pay for them. The following years we made big losses, then belatedly put up subs (1991/2 and 1995/6) to compensate. Also, we got behind with printing journals in the mid 1990s so bills were coming in late, making the cash situation look better than it was; this came home to roost in 1995/96 when we paid for three issues of the journal. The journal is now back on time and produced more economically thanks to sterling work by Gábor Lövei. The only big profit in the middle years was in 1992/93 as a result of getting a \$10,000 Lotteries Science grant to pay for one journal issue. Since 1988/89 accumulated net losses are \$12,100 and our net worth (the General Fund in the accounts) is down \$15,640. We have at times had less than 4 months operating expenditure on hand as reserves, which I think is way too low. I suggest as a policy that we need about one year’s spending in the bank for reserves. Post-1995 the average annual expenditure for two journals has been \$24,280 and for all other expenditures \$16760, making average annual expenditure of \$41,040. I suggest we should get reserves up to about this level of \$40,000 and keep them there.



**Table 2: NZES Conferences**

Year	Venue	Dates	Joint with/theme	Profit \$	Attendees	NZES Award	Best student talk prize
1988	Dunedin	22-26 Aug	Natural Estate	-133	210		Liz Slooten & Stephen Dawson (Canterbury)
1989	Lower Hutt	21-25 Aug	Soil Sci	362	160		Chris Lusk (Auckland)
1990	Hamilton	19-24 Aug	UNESCO ecotones	3624		Henrik Moller	Fran Hyland (Victoria)
1991	Nelson	25-29 Aug		2899	164	Colin Burrows	Mel van Aalst (Auckland)
1992	Christ-church	24-27 Aug		528	>148	EG White	Janet Wilmshurst (Canterbury)
1993	Auckland	23-26 Aug	Systanz	3689	170	no award	?
1994	Hokitika	21-25 Aug		1633	>104	no award	David Forsyth (Lincoln)
1995	Massey	9-13 Jul	Agents of decline	5120	190	Bill Lee	Eric Edwards (Otago)
1996	Lincoln	30Jun-4Jul		4032		Nigel Barlow	Shona Lamoureaux (Canterbury)
1997	Wellington	29Jun-3Jul	Systanz, EntSoc	4030	>348	John McLennan	Lynette Hartley (Waikato)
1998	Dunedin	25-28 Nov	Aust ES	3547	430	John Innes	Nick Bond (Melbourne), Alison Evans (Lincoln), Paula Peters (Monash)
1999	Blenheim	29Jun-2Jul	Mainland Isl. & Grasslands		150	Carloyn King	(Joint) Souzi McGill (Lincoln), Deborah Wilson (Uni British Columbia)

**Table 3: NZES office holders**

Year	President	VicePresident	Secretary	Treasurer	Journal	Newsletter	Submissions
88/9	Murray Williams	Judith Roper-Lindsay	Ken Hughey	Nigel McCarter	Nigel Barlow	Rod Hay	
89/90	Judith Roper-Lindsay	Peter Williams	Ken Hughey	Nigel McCarter	Nigel Barlow	Allison Ballance	
90/1	Judith Roper-Lindsay	John Parkes	Carolyn Mason	Dave Kelly	Jill Rapson	Graham Hickling	
91/2	John Parkes	Morgan Williams	Carolyn Mason	Graham Nugent	Jill Rapson	Mary McEwen	Paul Blaschke
92/3	John Parkes	Morgan Williams	Carolyn Mason	Jenny Brown	Jill Rapson	Mary McEwen	Paul Blaschke
93/4	Morgan Williams	Graham Hickling	Carolyn Mason	Colin O'Donnell	Jill Rapson	Mary McEwen	Paul Blaschke
94/5	Morgan Williams	vacant	Carolyn Mason	Colin O'Donnell	Jill Rapson	Mary McEwen	Paul Blaschke
95/6	Carolyn Mason	Craig Miller	Fran Kell	Colin O'Donnell	Jill Rapson	Mary McEwen	vacant
96/7	Carolyn Mason	Craig Miller	Gillian Vaughan	Colin O'Donnell	Gábor Lövei	Astrid Dijkgraaf	Jason Roxburgh
97/8	Craig Miller	Wren Green	G Vaughan/D Kelly	Colin O'Donnell	Gábor Lövei	Astrid Dijkgraaf	Jason Roxburgh
98/9	Craig Miller	Wren Green	Dave Kelly	Colin O'Donnell	J Parkes/D Wardle	Astrid Dijkgraaf	Jason Roxburgh

Note that the year after they step down, presidents are on Council as Immediate Past President

### Councillors

88/9	Paul Blaschke ,Gavin Daly, Mark Davis, Vicky Froude, Murray Potter, Susan Timmins, Carol West,Bill Lee, David Norton			
89/90	Paul Blaschke, Gavin Daly, Mark Davis, Vicky Froude, Murray Potter, Susan Timmins, Carol West, Graham Hickling, Mary McIntyre			
90/1	Allison Ballance, Colin Burrows, Gavin Daly, Kath Dickinson, Vicky Froude			
In 1991 Council size was reduced with 4 councillors elected for two year terms, maximum of two consecutive terms.				
91/2	Mary McEwen	Murray Potter	Graham Hickling	Colin O'Donnell
92/3	Colin Townsend	Neil Mitchell	Graham Hickling	Colin O'Donnell
93/4	Colin Townsend	Neil Mitchell	Fran Kell	Craig Miller
94/5	Dave Kelly	Neil Mitchell	Fran Kell	Craig Miller
95/6	Dave Kelly	Neil Mitchell	Alastair Robertson	Ian Spellerberg
96/7	Dave Kelly	Janice Lord	Alastair Robertson	Ian Spellerberg
97/8	Dave Kelly	Janice Lord	Alastair Robertson	Judith Roper-Lindsay
98/9	Bruce Burns	Ben Reddiex	Janet Wilmshurst	Judith Roper-Lindsay

**Table 4. Life members of NZES**

Name	Year honoured	Name	Year honoured
KR Allan	1964	JA Gibb	1985
KE Lee	1965	J Nicholls	1985
Norm Elder*	1971	Mike Rudge	1988
Ruth Mason*	1974	John Parkes	1997
Gordon Williams*	1978	Peter Wardle	1999
Kaz Wodzicki*	1984		

\* deceased as at 1997

## MARK SANDERS ONE OF THE NEW COUNCILLORS

I'm currently employed as the Scientist with Project River Recovery (PRR), at DOC's Twizel Area Office. PRR is a braided river and wetland restoration project, funded by Meridian Energy (previously ECNZ) as compensation for impacts of hydro-development on rivers and wetlands. We take a habitat/community approach, and work alongside the species-focussed Black Stilt project. I've been with DOC for three years, and during this time my main research interests have been predators and other causes of mortality of braided river birds, and investigating ways to reduce this mortality.

My job also calls for monitoring and research relating to a range of topics including endangered plants, aquatic and terrestrial invertebrates, weeds, and human impacts. I first began working in the Mackenzie Basin after the electricity crisis of 1992, and did my PhD on aquatic invertebrate response to lake level fluctuations and substratum manipulations in wetlands.

That's the work stuff. Some personal stuff: I'm 34, married to Kate, we have two 'chidlers', aged 3 and 1, and we don't get enough sleep. We enjoy living in Twizel, the architectural capital of the Mackenzie Basin!

Mark Sanders, Councillor

## CODE OF PROFESSIONAL STANDARDS AND ETHICS

### *Royal Society of New Zealand*

Below you will find reproduced in full the Royal Society of New Zealand Code of Professional Standards and Ethics. This has been reproduced from the webpages (<http://www.rsnz.govt.nz/about/ethics.html>) of the Royal Society with kind permission.

It was agreed at the last AGM to publish this code so that members of the Ecological Society of New Zealand could ascertain for themselves whether this code is suitable for adoption by the Ecological Society, whether it needs adjustment, or if it will serve as an initial model for our own Code of Standards and Ethics.

The Committee urges **all members** to submit their comments and contributions regarding this code, even if it just reads "We agree with all points". This can be done by sending written submissions to the Secretariat:

Sue Sheppard & Angela Wilkinson  
PO Box 25 178  
Christchurch  
Phone/fax 03-384-2432  
Email [sheppars@ihug.co.nz](mailto:sheppars@ihug.co.nz)

These submissions will be collated and compiled by the appropriate committee members and a summary published in the newsletter at a later date.

Or, if members feel that discussion is warranted on a particular issue, send an email message to the list server "[nzecosoc-request@its.canterbury.ac.nz](mailto:nzecosoc-request@its.canterbury.ac.nz)" with your suggestions and comments. Note that this email address has changed from what it was.

*Released by the President, Sir John Scott KBE FRSNZ, with the authority of the Council of the Society, on 1 January 1999 in terms of Sec. 34 of the Royal Society of New Zealand Act 1997*

Preparation of this Code was delayed as responses to the Draft (dated 21-4-98) came in over an extended period of time. Some of the key suggestions were diametrically opposed one to another. In general, however, the response was strongly supportive of the changes which had been made to date, and the overall value of the Code was not questioned by any respondee. Most recognised the difficulties facing the subcommittee and accepted that their suggestions were tentative and for discussion. However, one key problem could not be overcome by simple alterations in the draft wording. As one reviewer put it, the subcommittee was "trying to span the spectrum from curiosity-driven Marsden science to secretive, proprietary-driven, close-to-market technology innovation", within one code.

The reviewer summarised the situation further by stating that Marsden science was "selfless, curiosity-based, open-ended, in the public domain, peer reviewed (peer perceived), and was concerned with creation of knowledgeable outputs." In contrast, Technology research which fell within the Royal Society brief under the terms of the new Act, was "industry needs driven, secretive, nationalistic and selfish, judged by the market, and was creative of products and not papers." He concluded that "trying to force Technology research into the culture of the Marsden Fund will present those involved with an impossible conflict of ethical responsibilities." That indeed has been the situation portrayed by the conflicting opinions in the submissions.

As Chairperson of the subcommittee, I had made several attempts to retain the concept of a unifying code but have finally come to the conclusion that the underlying problem must be clearly recognised. Accordingly, the "Charter" section contains major alterations and additions.

In other places, clauses have been moved between sections (where several respondents made the same suggestion), and attempts have been made to clarify the meaning of individual clauses. The new Code is, in consequence, somewhat longer than that of 21-4-98.

### **Preliminary Statement**

This is not a legal document, nor is it a set of immutable rules. Rather, the Code sets out guidelines which the Council of the Royal Society of New Zealand believes constitute the probably consensus viewpoint on key aspects of professional standards and behaviour for New Zealand scientists and technologists. Council believes that many of the principles incorporated within the Code will stand the test of time. Given the rapid changes across all sections of society and the economy, some sections of the Code will require adjustment. The Code will be reviewed in three years time. Continuing debate on the Code clauses is to be encouraged and submissions over the three years will be welcomed.

### **Charter**

(The new material under this heading should perhaps be placed under "General Purposes and Principles")

#### **Preamble**

Scientists and technologists, as individuals and within their various organisations, recognise their responsibilities to the broad community, but the specific environments in which they undertake their various tasks have changed markedly over the last few decades. Whereas, earlier this century, scientific knowledge in general was regarded as neutral, available to all, and inherently a "community good", that concept must be placed into a wider context. The increasing emphasis on concepts of intellectual property, whether generated through public funding or via private, strictly commercial resources, has challenged the former concept of universal access to knowledge gained by scientific enquiry. Governments and communities generally now seek to use intellectual property to create economic advantages for their populations. In turn, public (governmental) investment accepts the reality of these worldwide changes in terms of effects on the national economy.

To be practical, any code of professional standards and ethics promulgated for scientists and technologists generally, must accept that there will be a division in terms of ethos and loyalty based on these across-societal and international changes in perception and attitude. This Code, which will be promulgated for a three-year trial period, attempts to encompass these difficulties. Any code which identifies these problems, but then proceeds to intensify the difficulties facing scientists and tech-

nologists, is unlikely to be honoured. Equally, as changes in the economic, scientific and technological arenas continue, efforts to produce guidelines must continue in the interests of society as a whole.

At present the Code has no statutory status and the following paragraphs do not set out any mechanisms for identifying, investigating or applying sanctions in situations where allegations are made that the Code has been breached by scientists or technologists. The time may well be approaching when some such mechanism will be required. Scientific fraud is recognised as an international problem and New Zealand will have to address this on a national basis at some stage. In the changing environment, temptations to invent data and to manipulate reports for benefit of a person or a funding agency, for instance, destroy the trust between scientists, technologists and the New Zealand community.

In the following sections, the word "must" implies an obligation for which there should be no exceptions; the word "shall" indicates a situation where virtually no exceptions are allowed; and the word "may" carries no sense of obligation.

### **CHARTER STATEMENT**

Scientific and technological investigation, application and teaching shall be undertaken by rigorous methods. Those undertaking these tasks shall do so with integrity in order to expand the knowledge of our universe. The application of that knowledge must conform to the broadly accepted standards of the community. Innovative research and technological adaptation, undertaken outside the industrial and commercial environment, shall be open to scrutiny and criticism from any competent quarter within the traditional pattern of international science. Scientific and technological work undertaken within industry and commerce must also comply to accepted standards of integrity, honesty and professional practices.

Thus, those scientists and technologists who commit themselves to this Code, shall avoid or abstain from scientific and technological work that directly or indirectly harms society or the living and physical environments to an unacceptable degree. Their work shall be undertaken in accordance with an accepted code of professional standards and ethics.

Scientists and technologists shall accept international obligations as well as primarily serving national interests. They thus have a duty to undertake surveillance in relation to introduction of technologies and application of scientific research based upon work undertaken overseas before such knowledge is applied within, or introduced into, New Zealand.

## STATUTORY PROVISION

Section 34 of the Royal Society of New Zealand Act 1997 makes the following provision for a code of professional standards and ethics in science and technology for members. Section 34 reads:

34. Code of professional standards and ethics –

- (1) The Council must issue for members a code of professional standards and ethics in science and technology.
- (2) The Council may from time to time issue amendments to a code of professional standards and ethics issued under subsection (1).
- (3) The Council must make the code of professional standards and ethics, and any amendments to it, publicly available.

## TITLE

The Code may be cited as the Royal Society of New Zealand Code of Professional Standards and Ethics.

## APPLICATION

This Code is available for use by all scientists and technologists in New Zealand. Adherence to the Code may be achieved by registration within the Royal Society of New Zealand, for those with the status of FRSNZ, CRNZ and MRSNZ. Thus, all individual members of the Royal Society of New Zealand must subscribe to the Code and they will be asked to account to the Society should their conduct be considered to breach any provisions of the Code.

### GENERAL PURPOSES AND PRINCIPLES

The quality of science and technology depends on the competence of scientists and technologists, their values and the environment in which they work. Scientific and technological investigation flourishes in an open society that values honesty, criticism and communication, and in work environments that support the ethos and recognise the benefits of science and technology, and where adherence to the highest professional standards and ethics prevails.

Scientists and technologists are complementary servants of society, dedicated to the pursuit of knowledge and to its responsible application. Both require, and should deserve, recognition by the communities thus served. Scientists and technologists, in considering their responsibilities to clients, colleagues and other interests, should also take into account their responsibilities to the wider community such that conflicts of interest can be avoided, if at all possible, and certainly acknowledged openly. In a situation where a conflict is clear-cut, the interests of the community should take precedence over the views and ambitions of individual scientists and technologists.

Science and technology is based on a shared pool of public knowledge. It is essential that this is constantly replenished, and all scientists and technologists have a general obligation to ensure that they contribute information as well as using the work of previous generations.

Science and technology should work for the well-being of society and the sustainable use of the natural environment.

## INTEGRITY AND PROFESSIONALISM

- 1) Members shall behave with integrity, using their knowledge skills and abilities to serve all sections of the wider community. Specifically, Members shall at all times:
  - (a) endeavour to obtain and present facts and given interpretations in an objective and open manner;
  - (b) strive to enhance the reputation of their scientific or technological profession;
  - (c) show respect, consideration and courtesy to clients and the public;
  - (d) observe fairness and equity in all aspects of research and the application of science and technology, including management of research and technology transfer;
  - (e) not endanger the health or welfare of all people, including those directly associated with science and technology;
  - (f) avoid or declare real or apparent conflicts of interest;
  - (g) accept a responsibility to avoid compromising the health, safety or sustainability of the natural environment.

## HONESTY

- 2) Members shall conduct themselves honestly. Specifically, Members shall at all times:
  - (a) fairly and fully represent results as they honestly perceive them, without falsification or bias;
  - (b) strive to record fairly the intellectual, material and practical contributions of others to their work and results;
  - (c) ensure that there is appropriate disclosure of any limitations on their work due to insufficient resources or other factors;
  - (d) retain all types of research records, where possible in archives, but as a minimum for 5 years; and where they are not commercially or personally sensitive, make them available for others. Any records which enable individual people to be identified must not

be made available or in a form permitting such identification without the consent of the individual people before or at the time of such release. It is a responsibility of researchers to ensure that this happens.

\*\*Note also a footnote at the end of this document (page 9)

- (e) avoid falsifying qualifications or claims of experience;
- (f) not commit or condone plagiarism;
- (g) be honest in the application of findings from scientific and technological research and in the transfer of technology across the community, nationally and internationally. Any selectivity in transfer should be openly acknowledged;
- (h) except where work and results are commercially sensitive, ensure the prompt publication of results from publicly funded research, or at least ensure that the results are readily available in the public domain.

### COMPETENCE AND STANDARDS

- 3) Members shall claim expertise only within their fields of competence, make optimum use of available resources, and follow acceptable work practices. Specifically, Members shall at all times:
  - (a) represent themselves as experts only in their fields of competence as defined by formal qualifications and demonstrable relevant experience;
  - (b) maintain a level of professional competence and make every endeavour to become familiar with recent advances in their areas of expertise;
  - (c) ensure that joint authors of publications and reports share responsibility for their contents; refuse to be associated with communications bearing names of honorary authors;
  - (d) have regard to the requirements, work practices and ethical standards of the International Council of Scientific Unions or any other relevant international organisation;
  - (e) adhere to the codes and disciplinary standards of professional societies and organisations of which they are members or by which they are registered;
  - (f) allow the highest standard, as defined by maximum benefit to the community generally, to prevail whenever there is any discrepancy or conflict in standards.

### RELATIONSHIP WITH COLLEAGUES

- 4) Members shall support ethical behaviour, and high professional standards, in relationships with their New Zealand and overseas colleagues. Specifically, Members shall at all times:
  - (a) review the work of colleagues without bias and treat all information so provided as privileged and confidential, unless to do so would conflict with the general purposes and principles of this Code;
  - (b) fully and appropriately acknowledge the work and contributions of colleagues;
  - (c) avoid falsely or maliciously attempting to impugn the reputation of colleagues; avoid compromising or denigrating colleagues in order to achieve commercial, professional or personal goals;
  - (d) support the career development of junior colleagues and students by providing honest comment on career prospects, the conduct of work, proposals, manuscripts and papers;
  - (e) encourage the development of emerging scientists and technologists;
  - (f) avoid seeking to gain unfair advantage for themselves or their employer through review or other advisory processes;
  - (g) be sensitive to the assumptions, points of view and perspectives of colleagues of other cultures;
  - (h) accept that researchers working on different approaches to the same question may each reach different but supportable conclusions within the context of their research; seek to reconcile differences in perspective, rather than denigrating the opinions of others.

### RELATIONSHIP WITH THE COMMUNITY

- 5) Members shall endeavour to make the results of their work available to the public as honestly and widely as possible. Specifically, Members shall at all times:
  - (a) be aware of ethical, social, cultural, legal and environmental implications and consequences of science and technology; in particular, be respectful towards the historical basis for differing perspectives, present or emerging, within the bicultural and multiethnic structure of our nation; seek to reconcile these differences through sensitive application of emerging knowledge in the interests of New Zealand society generally;

- (b) endeavour to communicate the results of their work to the wider community in an understandable form without scientific distortion; in so doing, avoid potentially misleading simplifications and unjustified extrapolations; identify clearly all speculative and interpretive statements;
- (c) endeavour to ensure all public statements are correct and are supported by competent research or scholarship;
- (d) avoid attempting to influence public policy decisions where there is contradictory or inconclusive scientific evidence without disclosure of the circumstances;
- (e) support the publication and dissemination of all competent research, even when its conclusions appear contradictory, or are contrary to currently accepted concepts or to their own opinions;
- (f) maintain awareness that human and societal values must be balanced against the potential consequences of unrestricted scientific enquiry and that they have a variable, but definite, measure of responsibility for the wider outcomes of their research.

#### **RELATIONSHIP WITH FUNDERS OF RESEARCH: PUBLIC GOOD AND COMMERCIAL APPROPRIABLE**

- 6) The general principles listed under the categories of Integrity and Professionalism, Honesty, and Competence and Standards, apply to both major categories of research, i.e. basic (scientific curiosity), and science-technology in the industrial-commercial sector. Thus, Members involved in research or technological developments for employers or other funding agencies should maintain the highest integrity and professionalism. Wherever reasonable, their employers should be encouraged to permit public disclosure of their results. Conversely, scientists and technologists in the industrial-commercial sector must recognise their responsibilities to their employer, especially in terms of the role of science and technology in creating wealth and economic growth. Thus, when Members undertake work for employers or paying clients, the interests of the clients normally should take priority over other interests, within the limits imposed by the Law, accepted ethical standards and public interest. Specifically, Members shall at all times:
- (a) exercise initiative, skill and judgement for the benefit of the employer or client;

- (b) ensure that clients are aware of the ethical and legal obligations of scientists and technologists whose services they are purchasing;
- (c) respect any confidentiality required by the employer or clients;
- (d) take all care to protect any intellectual property employed within, or arising from, research undertaken for the employer or client;
- (e) accept personal responsibility for work done by themselves or under their supervision-direction;
- (f) in no circumstances promise to, give to, or accept from any third party, anything of substantial value by way of gratuity or personal advantage;
- (g) ensure that clients or employers are aware of the general place which publication of research findings plays in the world of science;
- (h) make available to the funding agencies, within appropriate time-frames, fully documented reports that are supported by competent research;
- (i) encourage employers to provide suitable alternatives for career advancement to compensate for restrictions on publication of key aspects of research experience and technological development;
- (j) oppose manipulation of results in a manner contrary to the general principles of this Code to meet perceived needs or requirements of employers, funding agencies, media or other interested parties, while accepting the particular terms of their research contracts.

#### **RELATIONSHIP WITH PAYING CLIENTS**

- 7) When Members undertake work for paying clients the interests of the clients should take priority. Should the interests of the client conflict with the law, accepted ethical standards or the broad public interest, the work should not be undertaken. Specifically, Members shall at all times:
- (a) ensure that clients are aware of the legal and ethical obligations of scientists and technologists whose services they are purchasing;
  - (b) not undertake work which they know to be in conflict with the general purpose and ethics of this Code.

## ENVIRONMENTAL CONSIDERATIONS

8) Members shall consider the environmental implications of their work, and draw the attention of those affected and of decision makers, to the significance of the research and to the perceived immediate and potential consequences involved. Specifically, Members shall at all times:

- (a) seek to observe the principles and practices of sustainable management in relation to needs of future and present generations internationally;
- (b) strive to identify impacts of their work on the environment and on people and communities; endeavour to assess and report on such impacts; seek to avoid or mitigate adverse environmental impacts;
- (c) strive to encourage within the wider community, and internationally, the avoidance or minimisation of adverse effects of science and technology on the environment;
- (d) pay due regard to international resource agreements and protocols on the sustainability obligations for science and technology;
- (e) foster environmental awareness within the science and technology professions, and among the public.

## USE OF ANIMALS IN RESEARCH AND TEACHING

9) Members shall seek to minimise detrimental use of animals in research and teaching, and shall give special consideration to the welfare of any animals used in these endeavours. For the purposes of this Code, the term “animal” shall apply to all vertebrate species but not to bacteria or sub-bacterial organisms. The term “animal” for these purposes also incorporates organisms from other phyla employed in specific projects which must be accorded a general respect for life and imposition of minimal trauma, pain or distress. Specifically, Members shall at all times:

- (a) adhere to any mandatory code of ethical conduct that may be applicable to the animal-based research or teaching being undertaken;
- (b) seek to make all those engaged in animal-based research or teaching aware of the need to practise and encourage the highest standards of care when dealing with animals;

- (c) make every endeavour to ensure that the proposed outcomes of any such research or teaching are sufficiently important to fully justify the use of live animals;
- (d) encourage the use of alternatives to live animals in research and teaching in circumstances where an appropriate alternative is available;
- (e) strive to determine the impact of their work on the welfare of all animals used in it, and to reduce the harmfulness of that impact as much as possible, both by refining their procedures and by using as few animals as will allow the expected gains to be achieved;
- (f) foster animal welfare awareness within the science and technology professions and among the public.

## EDUCATIONAL RESPONSIBILITIES

10) Members in formal teaching settings, as mentors to junior colleagues, during interactions within their professions, or in their dealings with politicians, the press and the public, shall participate as educators advancing scientific and technological awareness, knowledge and understanding among those outside their profession. Specifically, Members shall at all times:

- (a) provide high-quality, up-to-date instruction and guidance in their specialist areas, including reference to established knowledge, recent developments and areas of controversy;
- (b) illustrate the observational and experimental foundations of science and technology, and particular features of good observation, good experimental design and data analysis in their specialist areas;
- (c) reveal the importance of analytical, critical and innovative thinking in scientific and technological enquiry;
- (d) strive to educate all other members of the community, thus making it clear how people generally benefit directly or indirectly from science and technology; in so doing, accept responsibility for stating objectively known risks and known benefits of particular experimental protocol or technological development. In particular, strive to present science and technology as major components of universal knowledge and culture, that is, a part of the heritage of civilisation; as a minimum in these regards, encourage the use of imagination and independence of thought in enhancing scientific and technological creativity;

- (e) indicate how imagination and independence of thought enhance scientific and technological creativity;
- (f) recognise their ethical responsibility to provide balanced and open-minded presentations of alternative explanations of observations and of any unresolved differences between the explanations;
- (g) remain aware, and encourage awareness that science and technology are not fixed and static; espouse the concept that established and accepted knowledge may be revised as a result of well-founded challenge.

*Footnote to section on Honesty 2 (d) :*

A potentially major ethical-legal problem unresolved as at November 1998.

For legal or quasi-legal purposes, such as defence of oneself against possible future challenges to personal integrity, special arrangements must be developed as a matter of some urgency in relation to destruction of some types of research information. Scientists and technologists whose work involves collection and collation of confidential data obtained from people who could be identified, directly or indirectly, from such records, need to exercise caution in terms of accepting instructions for mandatory destruction of research records, e.g. at five years after completion of the work. Archiving of such data sets will be expensive but may be required.

Alternatively, it is possible that legal frameworks can be devised which permit retention of such personalised, identifiable data either by the investigator under secure conditions or by some official organisation, either for an indefinite period or, e.g., for two decades, or for the lifetime of that scientist or technologist. Various societies and professional disciplines have promulgated guidelines in this regard, or are addressing this issue in relation to their own members.

## NEW AND RESIGNED MEMBERS

Membership: 26 new members formally accepted, including 17 unwaged: Brent J Barrett, Kim Bestic, Chelsea Brindle, Nichollette Brown, Max D Dewdney, Megan C Duncan, Nicola A Irvin, Rebecca N James, Darryl Jeffries, Leigh Marshall, Lucy C Martinez, Lyne M McFarlane, Daniel Meier Behrmann, Leslie F Molloy, Vivienne J Nicholls, David Snell, Wendy J Sullivan.

Nine new Full members: Andrea E Byrom, Mark Davis, Murray G Efford, Ojan M Khoey, Rory J McGirr, Marilyn Merrett, Linda Newstrom-Lloyd, Charlie Palmer, Rhonda M Pearce.

Seven resigned members accepted with regret: A & P Campbell, J.T. Darby, Donald Drake, Matt J Easterbrook, Christopher L Guy, Michael Heads, J.S. Holloway.

## REPORT ON PROFESSIONAL BODIES

### MfE Meeting 15 JULY 1999

#### *MfE Work Programme for 1999/2000*

Much as before and 'new money' will go to continue key initiatives such as the environmental indicators programme which MfE see as one of the most significant things they have done. New efforts will be going into developing the linkages between performance indicators, biodiversity policy statement and promotion of good practice.

#### *RMA Matters*

MfE are more relaxed about the new Bill, which was sent to the Transport and Environment Select Committee yesterday, than Forest & Bird (refer article this issue). How long it will be open for submissions is up to the Select Committee to decide. A key issue obviously is whether there will be efforts to get it through this session before the election. We were told that Upton told the Local Govt NZ conference this week that he doesn't expect it to get through before the election. The tenuous nature of the Govt's majority could make that more likely to be the case than normally.

However, there is always the possibility Govt may try to split off bits of the Bill and get them through as separate pieces of legislation.

Council may want to consider putting a submission forward on the revised Bill. Copies of the Bill will be available from Bennets Bookshops from Friday 16th July. We were told that there is relevant information on the MfE website and on Upton's Minister For the Environment (Arcadia) website. The latter includes MfE advice documents, one is 350 pages long (!!!) and Upton's rationale for the Bill.

#### *Update on HSNO Reform*

There is a Ammending Bill that may come into Parliament before the election. Details of the amendments are in a summary chart paper.

We had a useful account of the six categories that *collectively* are required to be considered when assessing the risk associated with a 'hazardous substance'. The six categories are: explosive, flammable, oxidising, corrosion (acids etc), toxic (to humans) and ecotoxicity. The first four are well understood internationally; the last two much less so especially the last one. But in no other country has

an effort been made to integrate the nature of the hazard a substance may pose across all six categories. (Initial work suggest it is mostly pesticides/herbicides that provide our ecotoxic hazards.)

#### *Update on Environmental Performance Indicators*

This is THE area of work that MfE attach great store to in terms of effort and outcome. As indicators are progressively developed they are moving to the area of how to use indicators to report on the state of the environment. The MfE work does not preclude other agencies (Councils, DOC) from having their own indicators but it should bring national consistency to the system.

The effort is also to develop indicators that have a 'policy relevance' i.e., are going to lead to agencies responding to the results in an appropriate manner. By contrast countries often develop indicators that relate to things that are easily measured, but easily ignored once measured. Discussion documents are now out on transport indicators. Areas where indicators are not yet developed are energy, pests, weeds, and diseases (not specified when asked).

#### *Managing the Urban Environment*

This is the current sexy topic in Wellington and elsewhere. Lindsay Gow gave us an interesting presentation on his findings from his recent trip to 3 USA cities that have been working on this for some time – Minneapolis/St Paul, Seattle, and Portland. A set of his overheads is held by the Secretary.

Wren Green, *immediate past Vice-President*

EcoLogic Conservation Consultants

2 Hinau Rd, Hataitai, Wellington 6003

Phone +64 4 386-2359 Fax +64 4 386-2361

## **FOREST & BIRD PERSPECTIVE ON RMA**

In a fit of urgency the Government is introducing the Resource Management Bill Wednesday, 14 July 1999. The Bill has nearly everything we've condemned in the past e.g.,

- contestable consent processing;
- extended commissioner hearings;
- direct referral of consent applications to the Environment Court;
- limiting the effect of proposed plans;
- limited notification of resource consent applications;
- restricting issues considered in controlled and restricted discretionary consent applications;
- limiting the national policy statement public processes;
- changes to section 32;

- making subdivision a permitted activity unless rules in a plan say otherwise;

Apart from the changes relating to the Historic Places/archaeological role, three good points are:

- extending the appeal period on plans and policies to 30 working days;
- allowing an appeal on non-notification but this is just a declaration that it should have been notified;
- clarifying that mining is banned in waters around the Coromandel Peninsula.

### **Media Release by Forest and Bird- 14 July 1999 - Wellington**

#### *Resource Management Bill new threat to conservation and biodiversity*

The Forest and Bird Protection Society today condemned the Government's proposals to amend the Resource Management Act and said they threatened the survival of New Zealand's natural heritage.

Society spokesperson, Barry Weeber, said the proposals to amend the Resource Management Act contained a range of measures that would reduce public involvement in environmental planning and would weaken conservation safeguards for New Zealand's threatened plants and animals.

"If implemented, these changes will make it harder to protect the habitat of kiwi and other threatened species."

Mr Weeber said the Resource Management Act was the key tool used to protect and conserve New Zealand's unique biodiversity on private land. "The amendments to the Act would make protection harder to achieve."

"Instead of weakening the Resource Management Act, the Government should look at enhancing conservation on private land through extra funding for the Nature Heritage Fund and Nga Whenua Rahui, and through a national policy statement on biodiversity."

Mr Weeber said the Bill contains provisions that will raise costs for submitters and applicants. "The Bill's provisions to have commissioners hear resource consents will make the process more expensive for all parties."

Mr Weeber said other proposals that will weaken the Act's environmental measures include removing the provisions for non-complying activities, removing some of the controls on subdivisions, and allowing private firms to process resource consents. For further information contact:

Barry Weeber, Senior Researcher  
Royal Forest and Bird Protection Society  
PO Box 631  
Wellington, New Zealand  
Phone 64-4-385-7374 Fax 64-4-385-7373  
[www.forest-bird.org.nz](http://www.forest-bird.org.nz)

## RESOURCE MANAGEMENT ACT AMENDMENT

The Resource Management Amendment Bill tabled in the House on 13 July “is the culmination of almost two years intensive policy analysis and public consultation”, said Environment Minister, Hon. Simon Upton.

“The changes are designed to reduce unnecessary delays and costs in the RMA process without undermining the Act’s environmental objectives”.

The final round of public consultation, from November 1998 through to January this year, resulted in a further 750 submissions. These have been carefully analysed and a number of changes made to the proposals that had gone out in November.

“The time taken to consult widely has been well spent. I believe all interest parties have come to a clearer appreciation of the issues at stake. The final result is a bill that accommodates a range of conflicting but nonetheless legitimate interests”.

The key changes put forward by the Bill are:

- The confused and wordy definition of “environment” has been clarified to limit the opportunity for creative legal arguments that can de-rail the essentially environmental purpose of the Act.
- A form of contestable consent processing is introduced. This will give the applicant choice for the first time. In response to concerns about conflicts of interest, it has been made clear that any person acting as a consent processor must be the contracted agent of the council.
- Applicants and submitters will have the right to require applications to be heard by an independent commissioner.
- Controversial and complex applications may be referred directly to the Environment Court for determination.
- A “half-way house” between full public notification and non-notification of resource consents will be introduced. The Bill will enable councils to notify applications only to those parties identified as being affected and who have declined to give their approval. As a safeguard, the Bill will provide an easier route for people to seek a review of the council’s decision whether or not to notify.
- The Bill also strengthens recognition of the protection of our historic heritage as a matter of national importance.

Mr Upton said he was expecting the Parliamentary Select Committee to give the Bill close scrutiny, “as some of these issues will benefit from a further hearing”.

“The RMA is the closest thing we have to an environmental constitution. This Bill will improve the way it operates in practice, and therefore, will help ensure this important legislation retains public support”, Mr Upton concluded.

The closing date for submission on the Amendment Bill is 13 August. Anyone wishing to obtain help in the preparation of submissions or more information on the Bill is invited to access [www.arcadia.co.nz/bill/index.htm](http://www.arcadia.co.nz/bill/index.htm) or phone Craig Mallett at MfE (04) 917 7419.

## NEW ZEALAND SCIENCE & TECHNOLOGY MEDALS – CALL FOR NOMINATIONS

The Royal Society is calling for nominations for the 1999 New Zealand Science & Technology Medals. The medals were instituted by the Royal Society at the request of the government to recognise and honour those who have made exceptional contributions to New Zealand society and culture through activities in the broad fields of science and technology.

Science & Technology Medals will be awarded to persons or groups for conspicuous, continuing contributions to science and technology over an extended period, or for an outstanding specific contribution to the advancement of science and technology. Nominees will normally be expected to be living and working in New Zealand, but people living overseas with strong New Zealand connections, either personally or through their work, will also be eligible.

Nominations close on 31 August 1999 and must be made on the nomination form which is available from the Royal Society by emailing [awards@rsnz.govt.nz](mailto:awards@rsnz.govt.nz)

## SCIENCE AND TECHNOLOGY PROMOTION FUND

Contestable funding of \$400,000 for the 1999/2000 financial year has been made available by the Government to promote positive values and attitudes towards science, mathematics, social sciences, and technology in interesting, exciting and innovative ways.

### Fund Objectives

Funds will be allocated to projects which demonstrate that they have been developed to achieve the following objectives:

- to impact on an audience that is not already showing a strong interest in, or expressing a strong understanding of, the value of science and

technology in achieving the success and well-being of New Zealand;

- to effect a measurable increase in positive attitudes toward science and technology;
- to promote the value of science and technology in interesting, exciting and innovative ways.

Consideration must also be given to the following:

- the extent to which the activity addresses an audience not already participating and committed to activities related to science and technology;
- the extent to which a project fills a gap in existing Science & Technology promotion in New Zealand;- the level of innovation, creativity and excitement of the proposed activity;
- the extent to which this funding leads to the commitment of non-Crown funding (either in the short term or the long term) which is otherwise unlikely to have been committed; and
- the applicants' relevant experience and proven ability to both manage projects and deliver their outputs.

While most grants will not exceed \$30,000, there is provision for one grant of up to \$100,000 for an activity which would have a major impact on a significant audience.

For more details, contact [spratt.p@rsnz.govt.nz](mailto:spratt.p@rsnz.govt.nz) or [taranchokov.a@rsnz.govt.nz](mailto:taranchokov.a@rsnz.govt.nz). The application pack will be posted on the Royal Society website no later than Wednesday 28 July.

## MYSTERY OF SOLAR WIND SOLVED

Particles streaming out from the sun catch a magnetic wave and surf across the solar system at almost two million miles an hour, a speed twice as fast as experts had predicted, according to new measurements from satellites. The high speed flow from the sun, called the solar wind, has been a mystery to scientists for 37 years because they expected the particles to poke along at a mere one million miles an hour. New measurements by two science satellites have solved the puzzle, by showing that the solar wind's speed is boosted by magnetic waves that spiral out from the sun. Further information from: Email: [alert.editor@rsnz.govt.nz](mailto:alert.editor@rsnz.govt.nz)

## SEARCH ENGINES

Internet search engines are not keeping pace with the explosive growth of the Web. A study found that search engines - which enable a computer user to find information by typing in a word or combination

of words - cover a diminishing fraction of Web pages and take a long time to list new sites. The most comprehensive engine, Northern Light, covers only about one-sixth of the Internet pages that search engines can reach, the study found. That is down from one-third for the best engine a year and a half ago. Northern Light is closely followed by Snap and Altavista. Hotbot, which led with 34% coverage in the previous study, was down to 11%. Yahoo and Excite were comparatively low at 7.4% and 5.6% respectively. Further information from: Email: [alert.editor@rsnz.govt.nz](mailto:alert.editor@rsnz.govt.nz)

## HECTORS DOLPHINS

Fisheries Minister, John Luxton, announced on 19 July that a voluntary agreement had been entered into by South East Inshore Finfish Management Limited that will significantly reduce the number of Hector's dolphins that are caught in commercial fishing gear. All set net fishers harvesting from Kaikoura to Oamaru have agreed to attach pingers to their fishing nets voluntarily. A pinger is an acoustic device that warns dolphins away from the fishing nets, thereby preventing them from being ensnared.

## DINOSAUR BONES AND GLOBAL WARMING

Discoveries in Antarctica of bones from the time of dinosaurs are exciting scientists pondering the mysteries of past global warming and continental drift. A geological expedition has unearthed what project leader Dr Jim Martin of the Museum of Geology in South Dakota called "huge deposits" of dinosaur-age bones in the remote Vega Island, Seymour Island and Antarctica Peninsular areas. The remains include bones of two giant marine reptiles: the mosasaur, a razor-toothed "duck-bill" animal with paddles, and the plesiosaur, which resembles popular images of Scotland's Loch Ness monster. Both were dinosaurs. Further information from: Email: [alert.editor@rsnz.govt.nz](mailto:alert.editor@rsnz.govt.nz)

## JURASSIC PARK, HASTINGS?

What was the most exciting thing your children did at school this year?

About fifty students at Hastings Boys High School have been thinking about cloning an extinct bird. The Huia is the emblem of this school and it has been extinct for seventy years or more - a victim of the colonisation of New Zealand and the attack by axe, saw, and fire on native forests. Life may imitate art in an event seemingly plucked from the pages of

“Jurassic Park” when a conference convenes at the school later this week to share the project with both the Maori community that will decide if the cloning should go ahead and with the scientists that would love to make it happen. The July 9-10 conference is sponsored by cyberuni ([www.cyberuni.ac.nz](http://www.cyberuni.ac.nz)) a California corporation that will donate \$100,000 of the proceeds of its Direct Public Offering to the cloning attempt if it goes ahead.

Some of the boys have been considering whether it is possible to clone an extinct species. Jurassic Park introduced the world to one approach - match the DNA of the extinct species to that of a living relative and plug in any gaps with DNA from the living relative. The Huia, unlike dinosaurs, roamed its small corner of the world until recently and hundreds, perhaps thousands, of stuffed specimens can be found in private collections and museums.

One pair, the male with his chisel like beak and the female with her uniquely different gracefully curved appendage, have had pride of place in the foyer of Hastings Boys High School since the 1920s. It might be possible to put together a complete sequence of Huia DNA using organic material from the bones and tendons of these and other stuffed birds. Professor Diana Wells of the biochemistry department of Otago University has explored cloning another extinct New Zealand bird, the Moa, using Ostrich DNA as a template. She will be speaking at the conference. Matters may be significantly easier than this. ‘Dolly’ showed that mammals at least can be cloned if a whole cell, or nucleus, is available.

New Zealand has had experience in cloning cattle using this technique. Dr David Wells of the Ruakura AgResearch Institute leads a team that has probably saved the Enderby cattle, the only cattle breed that can survive on a diet of seaweed, from extinction. Culling by the Department of Conservation reduced the breed to a single surviving, and ageing, cow. Thank to Dr Wells and his team, and a mixture of in-vitro fertilisation (using semen taken from dead bulls and frozen) and cloning, the Enderby herd is now approaching double figures.

If a whole Huia cell can be extracted from a tendon or bone of one of the stuffed birds, a proven technology could indeed clone the Huia if an appropriate surrogate bird can be found. However, the chances of extracting a viable cell or cell nucleus are remote. Of course, there is more to cloning than science. The boys have also debated the moral issues involved. Although the debate has at times been heated, the consensus has been in favour.

The dispute is over whether the New Zealand government has a moral obligation to pay for the cloning attempt. Although the politics may not

interest him, Melbourne philosopher and Roman Catholic priest, Rev. Dr. Norman Ford, director of the Caroline Chisholm Centre for Health Care Ethics, will speak to the conference on the moral issues. The boys have also been assisted in their ethical considerations by Dr Vanya Kovach of the University of Auckland’s philosophy department, who spent a day at the school holding workshops.

Further Information about the conference can be found on-line at <http://www.cyberuni.ac.nz/huia> The Treaty of Waitangi implications are particularly interesting.

### Contacts

Keynote Speakers Rev. Dr Norman Ford SDB STL PhD Foundation Director, Caroline Chisholm Centre for Health Ethics, Melbourne, Australia Adjunct Professor, Australian Catholic University Catholic priest and a Salesian of Don Bosco (SDB) phone +64-25- 2775532 author of : When did I begin? Conception of the human individual in history, philosophy, and science. CUP 1988 (translated into polish in 1995 and Italian in 1997)

Professor Diana Hill PhD Director, Molecular Biology Unit, Department of Biochemistry, University of Otago fax: +64-3-4775413 phone +64-25-998674 Dr. Hill leads a team that is interested in ‘ancient DNA’. Her team has recently investigated cloning the Moa, an extinct bird. This work has commercial implications as the giant Moa was a very large bird (3 metres high). If its growth hormone gene could be introduced into a bird bred for meat, such as the ostrich, then the product might be a larger bird that efficiently converts food to meat.

Mr Rupene Waaka Ngati Huia The Ngati Huia are a Maori hapu with (perhaps obviously) a special relationship with the Huia. They tried very hard to save the bird from extinction and have a special perspective on the ethical and moral issues surrounding any consideration of its cloning. We are privileged to have this group attend our conference. Fax: +64-63645313 phone +64-63647830

Dr David Wells PhD Ruakura Agriculture Research Centre, Hamilton, New Zealand phone +64-78562832 fax +64- 78562836. Dr Wells heads a team that has probably saved the Enderby cattle, the only cattle breed that can survive on a diet of seaweed, from extinction.

Conference Organisers Dr RM Cullen Chairman, Matthew Gardiner-Hill Community Trust secretary, academic committee, email [rmccyberuni.org](mailto:rmccyberuni.org) Mr. James Watson senior master Hastings Boys High School chairperson for the conference

## GRAEME CAUGHLEY TRAVELLING FELLOWSHIP IN ECOLOGY

### The Fellowship

The Fellowship commemorates the work of Dr G J Caughley FAA in ecology and wildlife management. Dr Caughley was a chief research scientist with the CSIRO Wildlife and Ecology, Canberra, until his death in February 1994. The Fellowship is financed through the generosity of his friends and colleagues.

The Fellowship is offered every two years. The inaugural Fellowship was in 1996. The 2000 Fellowship will be to the value of \$4,000.

The purpose of the Fellowship is to enable ecologists resident in Australia or New Zealand to share their expertise by visiting scientific centres and giving lectures in countries other than Australia or New Zealand.

### Eligibility

The Fellow will be an ecologist resident in Australia or New Zealand. Preference will be given to an applicant who indicates an interest in population ecology of wildlife and its scientific management.

Applications for the 2000 Fellowship are invited. Applications are confidential and should be submitted on a form available from the Academy or at [www.science.org.au/awards/awards.htm](http://www.science.org.au/awards/awards.htm). Please submit five copies to:

The Executive Secretary  
Australian Academy of Science  
PO Box 783  
Canberra ACT 2601  
fax 02 6 257 4620  
email: [ac@science.org.au](mailto:ac@science.org.au)

### Details required on application form

1. Name and address of applicant:  
telephone:  
fax:  
email:
  2. Brief description of proposal (100-150 words) and evidence of support from host institutions(s).
  3. Signature
  4. Attachments (please check)
    - a. Curriculum vitae and a list of your 5 most significant papers relevant to the proposal
    - b. A detailed proposal
    - c. Names and addresses of 2 referees
- Closing date 27 August 1999

## POSITION FOR PROFESSOR OF BOTANY

### (Ecology and Environmental Science)

### The University of Melbourne

### Faculty of Science

The University of Melbourne is an internationally recognised teaching and research institution. Commitment to excellence is demonstrated by innovative academic programs and its record as Australia's largest recipient of competitive research funding.

Applications are invited for a professorial position in ecology and environmental science in the School of Botany at the University of Melbourne.

### The Position

The School of Botany, a Faculty of Science department, is one of the premier Plant Sciences departments in Australia and has an outstanding international reputation. The School includes an ARC Special Research Centre for Plant Cell Biology and a Cooperative Research Centre for Plant Bioproducts. The School also provides teaching at the undergraduate level and research training to 50 postgraduate students.

### The Person

The successful applicant will have a distinguished international record of research in the field of ecology and environmental science, which will complement the existing strengths in the School of Botany. The appointee will have demonstrated exceptional academic and management qualities combined with experience to provide leadership in teaching, research and external interactions of the School. The appointee must be committed to the further development of strategic objectives of the Faculty including supporting the environmental science program.

### The Benefits

The remuneration package is approximately AUD111,000 including superannuation (excluding any loadings such as for Head of School). In addition, provision exists for four weeks annual leave and for study leave.

### Duration

This Chair is offered on a continuing basis. Appointment will be available from 1 July 2000 or later by negotiation.

### Contact

Further information on the School is available on the internet: <http://www.botany.unimelb.edu.au> Enquiries of an academic nature may be directed to the Dean, Faculty of Science, Professor John McKenzie,

telephone: 61 (3) 9344 4179; secure facsimile: 61 (3) 9347 6739; e-mail: dean@science.unimelb.edu.au or the Head of the School of Botany, Professor Pauline Ladiges, telephone 61 (3) 9344 5067, secure facsimile 61 (3) 9344 7049; email: p.ladiges@botany.unimelb.edu.au Information about the position, including details of the application procedure, conditions of outside work, superannuation, travel and removal expenses, housing assistance and conditions of appointment, is available from Ms Lydia Simonow, telephone: 61(3) 9344 7528; secure facsimile: 61(3) 9344 6897; e-mail: l.simonow@execserv.unimelb.edu.au This information is also available on the internet: <http://www.unimelb.edu.au/ExecServ/Seniorapp/index.htm>.

### Application to

University Secretary, The University of Melbourne, Parkville, Victoria 3052, Australia (marked "PERSONAL AND CONFIDENTIAL") and identified as Application No. 99/15. Secure facsimile 61(3) 9344 6897, by 30 September 1999.

The Council reserves to itself the right to make no appointment or to fill the Chair by invitation at any stage.

## CONTACT EMAIL ADDRESSES

NZ EcolSoc email list server (Address changed)

Please note that we don't promise that messages will be frequent, or gripping; this is a means of communication, not a promise of enlightenment! It will work if ecologists here use it (well).

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

nzecosoc-request@its.canterbury.ac.nz

(NOTE this address has changed) The recommended way to subscribe is to send a message with two lines:

SUBSCRIBE NZECOSOC

END

UNSUBSCRIBE NZECOSOC

This is the command you should use if you want to stop receiving mail from this list.

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 subscribed, use the address;

nzecosoc@its.canterbury.ac.nz

For information on the listserver contact the newsletter editor (astrid@mad.scientist.com) or

myself at d.kelly@botn.canterbury.ac.nz. For information on the Australian listserver contact Dave Kelly.

## FORUM TO PROMOTE URBAN ECOLOGY IN NEW ZEALAND

On 25 March 1999, Lincoln University hosted the Workshop "Urban Ecology in Canterbury: Strategy for Future Biodiversity, Ecological Integrity and Landscape Design". The main goals of this workshop were:

- to introduce and promote urban ecology as a science;
- to explore the European experience of urban ecology as the leading example while considering developments in other parts of the world;
- to review New Zealand experience in urban ecology emphasising Canterbury;
- to discuss the needs, opportunities and perspective of urban ecology in New Zealand.

This workshop was organised for 20 invited researchers, landscape architects, TA planners and practitioners, community groups, environmental engineers and educators. Representatives were present from Lincoln University, Landcare Research, Christchurch City Council, Department of Conservation and Lucas Associates. Emphasis was given to natural history of urban landscapes rather than environmental quality, social and economic issues.

### Presentations

Professor Ian Spellerberg, Head of Environmental and Design Division of Lincoln University welcomed participants. He noted that this workshop is one of the first in the field of urban ecology in New Zealand.

Dr Maria Ignatieva introduced a European definition of urban ecology by the 'father of urban ecology' Prof. G. Sukopp as "both a practical science dealing with the environment of people living in towns and cities, and the associated 'environmental problems' such as water, air and soil pollution, extraction of drinking water, transport planning, noise, etc., and a biological science as well". Europe has initiated a very broad range of investigations on urban climate (emphasis on pollution), water, soils, flora, biotopes or habitats, fauna, green open spaces in cities and opportunities for landscape design. Many European cities have published urban ecology books, they have developed urban ecology terminology, and established different national and international programs and organisations ('Man and Biosphere', 'Urban Ecology study group of

INTECOL', 'Ecopolis' etc.). Maria also mentioned the status of urban ecology in the US, Australia, South America and South Africa. The most important initiatives in the US and Australia are the organisation of Centres for Urban Ecology.

Dr Colin Meurk spoke about perspectives for urban ecology in New Zealand. He reminded us of the fact that the vast majority of the world's and NZ's people live in urban and intensively utilised rural environments. It is imperative, therefore, that urban dwellers experience and understand nature if the looming environmental and conservation crises of the planet are to be addressed satisfactorily. NZ ecology has historically polarised along esoteric (search for the pristine holy grail) versus utilitarian lines (maximising production or beautifying gardens using "lifeless", monocultures or formal exotic systems). There is an accompanying spatial separation - nature in remote national parks that most people never see, and 'industrial culture' where people live. NZ cities provide opportunities for research, knowledge, understanding, wise use of resources and appreciating nature. Because of major ecological and social problems with naturalised exotic species in New Zealand it is very important to find a synergism between natives and exotics and how to manage their diversity and balance. There is also a particular opportunity to reverse biodiversity decline in cities and rural lands where there are receptive sites, economic resources, and what may be termed an urban paradox (fewer exotic browsing and predatory mammals, in some cases, providing more hospitable habitats for sensitive indigenous species). Colin highlighted research opportunities in urban ecology such as: basic inventory of different components of urban ecosystems; quantifying biological thresholds, processes and linkages in order to operate efficient and ecologically viable cities; the socio-political dimension that underpins everything about a city; creating partnerships between science, community, schools, universities, local government, industry, planners, architects, designers and artists.

Kate McCombs, Christchurch City Council, discussed the results of scientific investigation into different aspects of Christchurch ecosystems. For 5 years, Christchurch City Council has had a program to inventory native species in natural and semi-natural landscapes. A database of species' attributes and distributions has been started. Kate referred to the (1998-1999) Lincoln University granted project "Urban Plants in Christchurch - origins, characteristics and biotopes" (Ignatieva *et al.*) presented at the 1998 Ecological Society Conference. The focus of this project is evolution of urban landscapes and interrelations between indigenous and exotic species

in different urban biotopes. The main objectives were:

- to introduce European terminology and methods for describing New Zealand urban plants and vegetation;
- to compare the plant associations of urban habitats in New Zealand with those of other temperate lands;
- to analyse the origins, relative status (native, naturalised, non-naturalised) and anthropotolerance of urban species in the world, as they pertain to New Zealand;
- to investigate the history of vegetation change and relative abundance of indigenous and exotic species in Christchurch from 19th century to present day.

The biotopes such as wasteland, lawn, herb border, shrubbery, parkland (woodland) and hard surface cracks were investigated. The degree of nativeness and adventiveness was used to compare New Zealand urban flora with those in European cities. New Zealand urban plant communities are poor in indigenous species. There are only 18 native and 159 naturalised vascular plant species in the Christchurch study. However, equivalent European urban habitat examples have over 90% indigenous species. About 90% of the naturalised species of European and other overseas origin, which were found in Christchurch, were registered in similar habitats in European cities. This demonstrates the process of global homogenisation of urban floras. Nevertheless, there are nearly 400 indigenous vascular species growing wild in Christchurch city and therefore an untapped potential exists for greater incorporation into this cultural landscape - to produce a more distinctive local character.

Andrew Crossland (ornithologist) referred to the importance of Christchurch for waterfowl and other wildlife and the huge increase recorded in waterways over the past decade - at least circumstantially linked to improved riparian management. This needs to be better understood. In discussion on an Urban Ecology Centre in the city he preferred to see gradual evolution once some of existing information is collated and a pool of knowledge and data can be assembled and made available. Important that it is people-friendly and not too academic.

### Discussion

Discussion by the participants about the opportunities for urban ecology in New Zealand emphasised many problems that exist in Christchurch city.

- The problem of native and exotic species in Christchurch is a question not only ecological but also social and political.

- The modern movement towards restoration of lost native ecosystems is part of the broader scale movement against homogeneous landscapes and towards a unique identity for New Zealand cities in general, not only a matter of native plants put into urban landscapes.
- There must be an integrated approach, which involves ecological as well as intellectual and cultural components of urban environment (an interdisciplinary approach).
- There is a necessity for ecological education in all sectors of society particularly concerning the meaning of, consequences and fulfilling of ecological integrity in cities.
- Importance of scientists working with communities on one hand and with municipalities on the other.
- Need for greater cohesion among council departments, which all need to be involved in the problems and solutions of urban ecology - utilities, services, parks, designers, planners, policy units; managers and councillors need more field experience of issues they are making decisions about - by organising bus tours, 'urban walks' etc. so the dirt can be kicked and perspectives shared.
- Importance of having a network in the field of urban ecology.

### Recommendations

From the results of this discussion, the following priorities for the future were outlined. It is envisaged that these initiatives will parallel or be carried out in conjunction with other related centres in the country.

1. Organisation of Urban Ecology Centre in Christchurch, possibly acting as an umbrella for activities by various agencies. One possibility would be to join with the Environment Centre – an already established network with resources and links to Christchurch City Council, Department of Conservation and Environmental Education. An Urban Ecology Centre could provide the opportunity for scientific research funding, student works, interaction with communities, relationship with official bodies, professional and educational organisations. Special stress was made on the close working with people and their ecological education.
2. Network in urban ecology (network of people with common interests). Informing about coming events (conferences around the world, lectures, workshops, meetings etc.).
3. Assemble bibliography of urban ecology available for New Zealand urban ecologists with emphasis on current literature.

4. Organise a conference "Urban Ecology in New Zealand".

Participants of the forum had the opportunity to look through about 100 publications in the field of urban ecology from different countries. Fourteen Lincoln University students (3rd year of the Landscape Architecture Program) presented their work from the Ecological Design studio. The main objective of this studio is to teach students to ecologically 'read' the landscape patterns and processes as a basis for landscape design. Riccarton Bush was chosen for the first practical studio. Riccarton Bush is the sole surviving remnant of those swamp forests which once flourished near the city of Christchurch and northwards along the coast of Canterbury. Students summarised the research on ecological parameters and presented this information in visual communication form (the poster).

M. Ignatieva,  
Lincoln University;  
ignatiem@lincoln.ac.nz

C. Meurk,  
Landcare Research, Lincoln;  
meurkc@landcare.cri.nz

## SEEM3 - THIRD CONFERENCE ON STATISTICS IN ECOLOGY AND ENVIRONMENTAL MONITORING

### "Estimating Animal Abundance and Related Parameters"

Honouring the Contribution of Professor George Seber to Ecological Statistics

<http://www.casm.otago.ac.nz/courses/SEEM3/>

The conference will be held at the University of Otago in Dunedin, New Zealand from 6-10 December 1999. Presentations will cover aspects of statistical ecology with a particular emphasis on mark-recapture application and theory and general sampling methods for wild animal populations.

#### Keynote speakers include:

Anne Chao, (National Tsing Hua, University, Taiwan) Ken Burnham, (Colorado Cooperative Fish and Wildlife Research Unit, USA) Jim Nichols, (Patuxent Wildlife Research Centre, USA) Ken Pollock (North Carolina State University, USA) Carl Schwarz (University of British Columbia)

#### Sessions planned include:

Closed population mark recapture models  
Open population mark recapture models  
Analysis of long-term ecological data sets

Sampling ecological populations  
 Contribution of statistics to ecological theory  
 Current issues in ecological statistics  
 Ecological case studies of all the above topics

### Abstracts

Abstracts of fewer than 250 words for contributed papers will be required by 31 August 1999. These may be sent to the Conference Secretary in hard copy form or via email. Contact details are included on the Registration Form. Alternatively, mail the conference secretary direct (address given below).

### Publication of Papers

Papers by keynote speakers and selected papers from those submitted by speakers will be published as part of a special issue of *Journal of Agricultural, Biological, and Environmental Statistics (JABES)*. Those papers not published in the special issue but that the authors want considered for publication will be treated as regular submissions to JABES.

### Registration

A registration form can be downloaded from the conference website. Alternatively mail the conference secretary for a registration form (address below). The registration fee will be NZ\$500 for the full conference. Reduced rates are available for attendance on the first three days or the last two days at NZ\$125 per day. Students will receive a discount if they provide with their registration form a letter from their Head of Department or Supervisor confirming their status. The fee covers the conference reception, lunch and refreshments each day. A 20% late registration fee will also apply after 31 Oct, 1999. All fees include Goods and Services Tax.

Fax/Phone/Mail contact Secretary, SEEM3 Conference, Centre for Applications of Statistic sand Mathematics P.O. Box 56, Dunedin Ph 64-3-479 7774 Fax: 64-3-479 8427

## A SYSTEMS ANALYSIS AND SIMULATION WORKSHOP

Announcing a 2-day workshop at the annual meeting of the Ecological Society of America, Spokane, WA (Sponsored by the International Society for Ecological Modelling).

### “Systems Analysis and Simulation in Ecology and Natural Resource Management”

Saturday, August 7 and Sunday, August 8, 1999, 9 AM - 5 PM

Organised by Michael Corson, Texas A&M University, and Bernard Patten, University of Georgia  
 The workshop will consist of alternating lecture and

laboratory sessions. Lectures will present, in the context of ecology and natural resource management, elements of systems thinking, theory and practice of simulation modelling and systems analysis, and simple-to-involved examples of systems approaches applied to resource and environmental problems.

Laboratory sessions will provide instruction in modelling with the software program STELLA, exploration of pre-programmed models, and experience in developing original models that address participants' own problems of interest.

Participants need no prior experience in systems analysis, simulation, or computer languages; we will tailor the workshop to address participants needs, from elementary to advanced. We encourage participants to bring information or data pertaining to problems they wish to model.

We will use sections from the textbook *Ecology and Resource Management: Systems Analysis and Simulation* by W. E. Grant, E. K. Pedersen, and S. L. Marin (Wiley, 1997).

The \$160 fee includes workshop computer, instruction, materials, and brown-bag lunch both days.

Please direct inquiries to:

Michael Corson

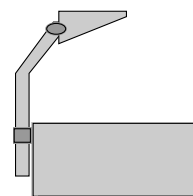
Dept. of Wildlife and Fisheries Sciences

Texas A&M University

College Station, TX 77843-2258

e-mail: m-corson@tamu.edu

URL: <http://acs.tamu.edu/~mcorson>



## UPCOMING CONFERENCES

September 1-3, 1999

### “Natural Hazards and Climate Change”: Meteorological Society & Geophysical Society Joint Conference

Wellington, New Zealand Contact

b.mullan@niwa.cri.nz (Met. Society),

martha@geo.vuw.ac.nz (Geophys. Society)

September 1-3, 1999

### NZ Marine Sciences Society Annual Congerence

Wellington, New Zealand. Contact Dr Janet Grieve,  
 NIWA (j.grieve@niwa.cri.nz)

*September 1, 1999*

**Climate change and rising sea levels**

Talk organised by Canterbury Branch of the Royal Society. Christchurch, New Zealand. Start time 20.00. Contact Email: jcwd@ibm.net

*September 2- 4, 1999*

**NIWA Waikato Science Fair**

Hamilton, New Zealand Contact The Chairman Waikato Science Fair Committee Box 415 Waikato Mail Centre Hamilton  
ph 0064 7 834 7501 fax 834 7509

*Sept 8 - 10, 1999*

**International Pandalid Shrimp Symposium**

Halifax, Nova Scotia, Canada , URL: <http://www.mar.dfo-mpo.gc.ca/shrimp/> Call for Papers DEADLINE: April 15, 1999

*September 14-18, 1999*

**International symposium of ethnobotany - medicinal plants: folk traditions, history, pharmacology**

San Jose, Costa Rica, America Central. Contact prof. Ronald Chaves Simposio P.O. Box 6131 1000 San Jose, Costa Rica fax + 506 283 02 63  
Email: simposio@nexos.co.cr

*September 14- 17, 1999*

**Agri-food Antibodies '99**

Norwich, United Kingdom. Contact Dr N R Towers AgResearch P, Bag 3123 Hamilton New Zealand Ph (07) 838 5187 towersn@agresearch.cri.nz

*September 20-23, 1999*

**Global Change & Terrestrial Ecosystems Food & Forestry: Global Change & Global Challenges**

Reading, United Kingdom Contact Sarah Wilkinson Food & Forestry Global Change & Global Challenges Secretariat Elsevier Science, The Boulevard Langford Lane, Kidlington Oxford OX5 1GB, UK Tel +44 1865 843691 Fax +44 1865 843958  
Email: sm.wilkinson@elsevier.co.uk

*September 22, 1999, ends March 23, 2000*

**Biotech 99 Sydney**

Australia. Contact Email: thall@aicconf.com.au

*September 26-29, 1999*

**10th International Rapeseed Congress "New Horizons for an Old Crop"**

Canberra, Australia. Contact 10th International Rapeseed Congress c/- Australian Convention & Travel Services GPO Box 2200 CANBERRA ACT 2601 Australia Ph: (+61 2) 02 6257 3299 Fax: (+61 2) 02 6257 3256

*Sept. 27-Oct. 1, 1999*

**7th Australasian Conference on grassland Invertebrate Ecology - "Ecologically sound management in grassland ecosystems"**

Perth, Australia. .  
Contact Email: johnm@ccmar.csiro.au

*September 27-29, 1999*

**tti'99: Conference on Technology Transfer & Innovation**

Melbourne, Australia. Contact Mark Kestigian SIRF 11/60 Collins St Melbourne VIC 3000 (ph) 61 3 9654 7155 (fx) 61 3 9654 2894  
Email: marcusk@sirf.com.au

*Sept. 30-Oct. 3, 1999*

**Equity in the environment? Seventh Annual Resource Management Law Association Conference**

Christchurch, New Zealand  
Contact email rmla@virtuoso.co.nz

*October 5-7, 1999*

**"Taste the sunshine"**

Napier, New Zealand. Contact Noel Humm (Secretary) Agresearch, Private bag 11-008 Palmerston North

*October 6, 1999*

**Off the wall: rocks and fossils**

Talk organised by Canterbury Branch of the Royal Society at Museum Discovery Centre Christchurch, New Zealand. Start time 19.30.  
Contact Email: jcwd@ibm.net

*Oct 10 - 17, 1999*

**VI Neotropical Ornithological Congress**

Monterrey and Saltillo, Mexico. Ernesto C. Enkerlin, Chair of Organizing Committee; Centro de Calidad, Ambiental; Sucursal de Correos J, Monterrey, N.L.; 64849 MEXICO  
FAX 011-528-359-6280.  
EMAIL: enkerlin@campus.mty.itesm.mx

*October 12-13, 1999*

**CAE Ocean Opportunities Conference**

Wellington, New Zealand. Contact John Lumsden Projects Director CAE University of Canterbury Private Bag 4800 CHRISTCHURCH  
Phone (03) 364-2219 Fax (03) 364-2069

*October 13-16, 1999*

**5th International Conference on the Ecology of Invasive Alien Plants**

La Maddalena, Sardinia, Italy. Registration and Information: Professor I Camarda / Dr Giuseppe Brundu, Universita di Sassari, Via F. Muroli 25, 07100 Sassari, Italy. E-mail: gbrundu@box1.tin.it

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This Newsletter was produced by Astrid Dijkgraaf 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:

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Next deadline for the newsletter is 1 October 1999.

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

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