

**New Zealand
Statistical
Association (Inc)**

Newsletter

ISSN 0112-2649

AUGUST 1996

Number 42



SISC-96, or the Sydney International Statistical Congress, was the main news for statisticians in New Zealand, though they did have to go to Australia for it. About 50 New Zealand statisticians made the trek to Sydney, most to present a paper at this combined conference of the Statistical Society of Australia, with two principal themes: *Quality* and *Environmetrics*; the Symposium on the Interface of Computing Science and Statistics, with the theme: *Graph - Image - Vision* and a Special Topic Meeting, organised by the Institute of Mathematical Statistics, with the theme: *Contemporary Nonparametrics*. They joined 850 other statisticians from around the world to exchange ideas, conversation, and e-mail addresses.



Pictured are some of the contingent from the University of Waikato enjoying the ambience of the Sydney conference dinner. As usual you have to deduce, or is it infer, the presence of Harold Henderson's camera.

For views of SISC-96 see inside the Newsletter.

The Australian and New Zealand Journal of Statistics

Jeff Hunter and I attended a meeting of the Council of the Statistical Society of Australia (SSA) held on the Sunday before the beginning of the Sydney International Statistical Conference this July. On the agenda was the proposal to merge the *New Zealand Statistician* and the *Australian Journal of Statistics* into a new journal to be called the *Australian and New Zealand Journal of Statistics*.

An index of the seriousness with which the SSA takes the future of its journal and relations with the NZSA was the fact that this was by a long way the most important item under discussion at the meeting. The issue was complicated by the proposal from Blackwell Publishers, who publish many statistics journals including the Royal Statistical Society Series A, B, C, and D (*The Statistician*), *Econometrica*, and *Statistica Neerlandica*, to take over the marketing of the new journal, or possibly that of AJS alone should the merger not proceed.

The Blackwell side of the discussions took place against a general agreement about the need for increased professionalism in and visibility of our journals and a need to respond positively to the challenge of electronic dissemination of publications. It was felt that international partnerships and alliances were the best way to do this.

Both SSA and NZSA have Newsletters for material of purely local interest, but it was recognised by both the Australian and New Zealand journal editors that it was important to encourage the publication of articles of interest to the local

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President's Column



The major statistical event of the past few months has been SISC-96, the Sydney International Statistical Congress at the Wentworth Hotel, 8-12 July. A large contingent of New Zealanders crossed the Tasman to participate in a professionally organised conference. As is typical at such large meetings one often spends too much time deciding which of the six or seven parallel sessions to attend. The special all-day workshops on "Quality and Statistics in Industry", "Imaging", "Survey Design and Analysis" and "Environmental Impact Assessment" had competition from some excellent invited and contributed sessions.

I took advantage of the Congress to accept an invitation to attend the Council meeting of the Statistical Society of Australia Inc. (SSAI) on the Sunday afternoon prior to commencement of SISC-96. I was joined by Murray Jorgensen for the discussions on the proposal for a joint journal with the SSAI. The motion that "the AJS and NZS merge, subject to discussions between the two societies re editorial responsibilities" was passed. Murray Jorgensen will report in depth on this at the AGM. The financial implications will fall within the bounds approved at the NZSA 1995 AGM when we agreed to a subscription increase of no more than \$15, should such a joint journal result from our negotiations. There are some minor technical problems as the SSAI will need to call a SGM to alter their constitution. Coupled with these discussions was a proposal from Blackwells to publish the journal. The SSAI is moving cautiously on this. A presentation was given by three representatives from Blackwells but other publishing companies also wish to have the opportunity to bid for the business. We are hoping that the joint journal will be up and running with at least three issues in 1997 moving to four issues a year thereafter.

The other major move from the SSAI, which was approved at their AGM during SISC-96, is that members of SSAI can now apply to become a Graduate Statistician (GStat) or a Chartered Statistician (CStat). An accreditation committee has been set up to make recommendations to their Council about applications for accreditation. We need to look

into this since the New Zealand Mathematical Society have also approved various classes of membership comprising Graduate members (GNZMS), accredited Members (MNZMS) and Fellows (FNZMS).

Another outcome of our closer links with SSAI was the opportunity to agree to be associated with their 1998 Conference (ASC-14) to be held on the Gold Coast during July. (I am sure many of our members will welcome the opportunity to experience some winter warmth and put some "applied probability" into action at Jupiters Casino.)

One observation I came away with is that the SSAI, because of the geographic spread, has quite active branches and special interest sections. In particular, their young statisticians are organising a workshop - WAYS 1996 - (Workshop for Australia's Young Statisticians) to be held in Wagga Wagga in October. It would be great if our younger members could be encouraged to attend.

I have reported elsewhere on the proposed review of mathematical sciences in New Zealand to be conducted by the Ministry of Research, Science and Technology. It is hoped to model the review along the lines of the Australian review (see the article by Graeme Wake in June 1996 Newsletter). This really is an opportunity to look critically at these disciplines and to make recommendations that will demonstrate how the country gains benefit from its investment in these areas. Let us make the most of this opportunity. If we don't, it is easy to see a significant diminution in New Zealand's capabilities in the Mathematical Sciences to the detriment of the nation.

Jeffrey J Hunter

NZSA President

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New Zealand Statistical Association

47th Annual Conference

Research in the Learning of Statistics

Victoria University of Wellington

Friday 30 - Saturday 31 August 1996

Editor's Musings



I never thought I'd make it to number two, particularly so soon after number one. However I have been very kindly given the opportunity by Statistics New Zealand to go and spend five months in Ottawa at Statistics Canada.

So I am putting together this edition a couple of days before I go. At this point I would like to say that without Harold Henderson the last one and this one could not have got out to you, so my thanks to him. Even though I will be in Ottawa I still intend to edit the December Newsletter. This shouldn't be a problem as all my contributions come via e-mail, and I send the results to Harold in the Waikato where it's published (you don't read the bottom of the front page do you) also by e-mail.

Having received no feedback as to what people want in this, though I did get some saying they liked the Newsletter I produced, I have drafted an editorial

policy so you know what is likely to end up in this publication.

This newsletter is a means to let members know what the NZSA is up to. Therefore reports from the president and committees who are working on your behalf, notices of meetings, and reports done under the auspices of the NZSA will continue to be the backbone of the Newsletter.

Also stories about New Zealand statisticians are always welcome. The local news items always find space and the chattier the better. I am open to nominations for local correspondents for those areas currently not reporting their doings (you know where I need them by seeing which ones are missing this month). I am also interested in awards or special honours for New Zealand statisticians. I would like to list higher degrees obtained by students, if people will supply me with this.

I will put in detailed information about the NZSA conference and any other statistical conferences in New Zealand. For statistical conferences in Australia I am willing to provide a paragraph or two about them, more if space permits. I prefer not to have long listings of overseas conferences as I think there are many other places where you can find out about them.

Yes, we do carry that bane of TV watchers (no, not party political broadcasts), advertisements. Small personal items will be carried free. Anything else you will have to put through Gary Dunnet, who will only ask for an arm.

New Zealand Statistical Association

President: Jeffrey Hunter

Secretaries: Greg Arnold & Siva Ganesh

Treasurer: Gary Dunnet

Editors: *NZ Statistician* Murray Jorgenson

Newsletter Richard Penny

Committee: Sharleen Forbes, Harold Henderson, Donal Krouse, James Reilly, Jean Thompson.

Subcommittee convenors: Stephen Haslett (SAPQC), Mike Camden (Education), John Waller (Publications), Jenny Mason (Science Fairs), Jeffrey Hunter (Standards), Caryn Thompson (Young Statisticians).

Further information from:

Secretary

New Zealand Statistical Association

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Wellington, New Zealand

Email nzsa@massey.ac.nz

Deadline for next Issue

All submissions for the next *Newsletter* to me by 6pm Friday 29 November.

By the time you read this I will be in Chicago at the Joint Statistical Meetings, along with another half-dozen kiwis. Having seen the programme, all 50 pages of it, it will be fun. So while you can envy me going to the Northern summer, remember the next editorial will come from the cold and snow of Canada.

Richard Penny

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Statistics New Zealand

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NEW ZEALAND

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Combined Journal

memberships, while seeking a wider readership for the publication(s). As ex-Newsletter editor I take particular pleasure in a comment by a senior SSA official that the NZ Newsletter was "better than ours". It was recognised that there were many individuals on both sides who gave time to society publications in various capacities and who were under pressure from other commitments. A combined journal would use the resources of these people better.

The meeting approved the merger with the New Zealand Statistician but there was some confusion on when it would happen, particularly as it seemed that it would be necessary to make SSA constitutional changes to incorporate NZ representation.

Later, in discussions between Jeff, Helen, Ian James (the editor of AJS), myself, and others it became clear that we could proceed with the merger in 1997 on the basis of a contract between the two societies, rather than by changing constitutions. We also concluded that the best editorial structure for ANZJS would be to have a Managing Editor (from either Australia or NZ), an Australian Editor, and a New Zealand Editor.

Murray Jorgensen

Publications - Annual Report 1996

Sales during the 1995/96 year were generally very good with sales of our older publications being steady, though not as strong as in previous years. 'Women with Maths' went quite well with approximately 200 copies being sold during the year. We still hold good stocks of 'Women with Maths', 'Understanding Surveys' and 'School Projects in Mathematics and Statistics', but the stocks of our other publications are much lower. I recommend that no fresh print runs of any publication be made. Peter Johnstone's book 'How to Plan an Experiment' which we are selling on commission, has sold moderately well.

The profit for the 1995/96 year is \$3800 on the cheque account. A much lower level of profit is expected this year.

After a number of years in this position I feel it is time to step down. If we are to continue producing and selling publications, then it would be preferable to have the position located in a different centre so as to try and 'catch' a different local clientele - though this is not essential.

John Waller

Education Committee

Due to overload, we cancelled our June meeting, but we still exist. It may be time for us to reassess our operations.

The Maths Advisory Group met on 11 June, somewhat depleted by the PPTA moratorium. Our attempt to up our representation to 3 failed. Our 2 reps are Caroline Smith and myself. However, it slowly became clear during the day that the MAG may or may not ever meet again!

The new National Standards Body for Science and Technology will oversee Statistics developments for the Framework. NZSA has had the foresight to nominate Sharleen Forbes for the one statistical place on this. NZSA will need to communicate with this NSB in the future.

The new Statistics units (for first year tertiary) are fairly ready, but can't be registered till they have a Moderation Action Plan.

The MAG discovered that 3 reports on last year's trials existed.

The report of the Tertiary Action Group is out. It contains a number of agreements between providers of degrees and the provider of the National Qualifications Framework (ie NZQA).

A note in the Education Gazette seems to extend some items to providers of diplomas and certificates. NZQA is planning a Unit based major qualification (or 2) for schools. We wrote to say that any qualification involving Communication must involve Statistics too. Schools (and others) assessing in Units are subject to extensive moderation. The Moderation and Assessment Guide for the Maths Units is huge, and should be a huge support to teachers.

Mike Camden

NZSA AGM, Friday 30 August 1996 Agenda

Apologies

Minutes of the 1995 AGM (A copy of the minutes will be distributed at the conference)

Matters arising from the minutes

President's report

Treasurer's report

Matters arising from the Treasurer's report

Election of Officers (President, Secretary, Treasurer, Committee(5), Corporate Representative)

Election of Auditor

Election of SAPQC

CSR (Closer Statistical Relations with Australia) Annual Conference (7-11 July 1997, in conjunction with NZMS and AMS, at University of Auckland) General Business

Young statisticians at SISC-96 and beyond

Two reports from SISC-96. One is by Kim Bannon from the University of Waikato, the other by Niki Thorne from Statistics New Zealand. Here you have the impressions of two young statisticians attending their first big conference, with one, Niki, having to go through the agony of presenting her first conference paper.



Many would have thought that the Waikato Statistics department was on mass-exodus from erupting volcanoes, but most of us were heading off to Sydney to enjoy ourselves at SISC-96. It was an excellent experience and with about

1,000 people in attendance it was a great opportunity to meet an international array of statisticians.

The conference was held at the Wentworth Hotel which is in the centre of Sydney and allowed the young statisticians to regularly have lunch and dinner together. During the long lunch breaks we visited the Opera House, the Botanical Gardens, and lots of other places - the location wasn't that important as wherever we were, we had a great time. It was good to meet other young statisticians from around New Zealand as it is easy to feel a bit isolated, even in Hamilton!

The conference talks varied, but the best one was the talk given at the conference dinner. It was this very dry, very boring looking, pompous man, who proceeded to tear strips of those there and those not there. At the end he removed his wig, and revealed himself as a professional comedian. It was very witty and very funny. (This may be available at some stage and I'll up-date you when I find out.)

Some of us who went have agreed to try and catch up in October sometime, but this certainly isn't exclusive to those young statisticians that went to the conference. If you're keen to join us for a night of excitement seeing the sights of Hamilton and enjoying the company of fellow statisticians then email me at ktmb@waikato.ac.nz. We'll probably organise staying the night at the 'Y' or at my flat for those of you from afar. I'll post notice on the anzstat page, so if you don't hear from me personally then look there.

Kim Bannon

Well to finally get there was great.

On the plane coming in Sydney seemed to just keep on coming. But it wasn't as busy as I thought it would be - just big and very warm!

The conference was excellent, it just finished too soon. I had a great opportunity to meet all sorts of statisticians ranging from those new, like me, to people who had given a good part of their lives to statistics and still had a passion for it. I got to find out what a lot of people were doing and quickly came to realise that no one person could be good in all areas of statistics - there is just too much. It was inspirational to meet the "big wigs" and find out that they are very human and after a few decades still find statistics inspirational.

Of course there were the young statisticians who came from the academic side as well as the industry side of statistics. I hope to help get the New Zealand contingent together like the Australians. I talk to these guys over internet through their newsgroup. To join this, email listproc@pell.anu.edu.au with no subject but in the body put "subscribe YOUNGSTATS your name". Then you can talk to the young statisticians of Australia and some of New Zealand about anything to do with Stats, questions, advice, notice of upcoming conferences etc. New Zealand have a good bunch who could help the people currently studying Statistics when they get further along, as well as each other.

Of course I have to mention the talks which varied a lot in presentation and level. We started out excellently with Professor May who made Chaos very intriguing for this statistician. So as I went to the Quality workshop on the Monday and hadn't heard many contributed papers I was very nervous about my paper on the Tuesday. Even worse, when I got there I found out that some of the equipment that I needed wasn't there. But it all arrived with 5 minutes to spare and apart from being very nervous I think it went well. It was a nice feeling to be able to answer people's questions when they approached me later and have people know who I was when I asked them questions in return.

All in all I found my first conference to be excellent, good people, good times (both socially :-) and professionally). I had a ball!

Niki Thorne

Statistics on the web

<http://maddog.fammed.wisc.edu/~helberg/statistics.html>

Conference Update and Reminder

New Zealand Statistical Association
47th Annual Conference
Research in the Learning of Statistics
Victoria University of Wellington
Friday 30 - Saturday 31 August 1996

As papers flow in to us, it is becoming clear that we will have an extremely rich and full coverage of the Statistical Education theme. This seems most appropriate at this time of change and growth in Statistical Education.

The Contents of the Conference

The Conference will contain two streams. The main stream and the keynote addresses will be about education in Statistics. The second stream will consist of papers on statistical methods and practice. Several of these have been accepted so far.

The registrations which we have received suggest that this Conference will fulfil its aim very well. The theme of *Research in the Learning of Statistics* will be covered thoroughly, from the New Zealand view, and from the international perspective. Teachers and researchers will present their reflections and findings from the School sector and the Tertiary sector. New Zealand's new Curriculum and National Qualifications Framework will be analysed and discussed, and possible future changes and needs will be raised.

The changes in technology, in the ways in which Statistics is usable, and in the ways people view the learning process, will be related to the learning of Statistics.

There will be workshops on the practicalities of putting the new parts of the Curriculum into the classroom.

The Conference includes slots for Student Presentations, the Young Statisticians' workshop and the NZSA AGM. Some statistical software will be on display.

Keynote and Invited Speakers.

We are pleased to present our two New Zealand keynote speakers:

Professor David Vere-Jones of Victoria University of Wellington, and **Maxine Pfannkuch** of the University of Auckland.

David's address will be about *Statistical Education in the Next 10 Years: Past Perspectives and Future Prospects*. His talk is built around impressions gained while he was involved with the

Statistical Education Programme of the International Statistical Institute. In particular, he was especially interested at that time in the problems of introducing statistical topics into the upper secondary school programme. He notes that, at the same time, profound changes were taking place within our own schools, and in our own society. It is not clear how the current statistics programme will fare in these changes, so some form of stock-taking and some attempt to assess our own situation from an international perspective, are in order. The address will offer some initial thoughts in this direction.

Maxine's address will be about *Statistical Interpretation of Media Reports*. Here is the abstract for her address:

Introductory statistics courses are increasingly focusing on teaching students to comprehend and evaluate media information. This paper investigates, through an analysis of two statistically based reports, the understanding and knowledge of a small group of students. These students were found to be developing interpretive skills which would possibly not be fully developed without specific instruction. The implications of the findings for teaching are discussed.

We are pleased to present four invited speakers from overseas:

Kay Lipson, Professor Peter Jones, Brian Phillips (all from Swinburne University of Technology, Melbourne) and Associate Professor Larry Weldon (from Simon Fraser University, B.C., Canada).

Kay and Peter will be jointly presenting "Teaching Statistics in the Twenty-First Century", and a workshop on the use of graphics calculators. Peter will be updating us on last month's International Conference on Mathematics Education. Larry will be speaking "On Usable Learning of Statistical Theory".

Reminders

Accommodation at Victoria University will not be available and participants will need to make their own arrangements. If you would like more information about hotels, motels and hostels near the university, please contact the conference organisers (preferably by email) and a list will be supplied.

The AGM and the dinner are on the Friday evening.

Correspondence should go to:

Statistics Conference, I.S.O.R.,
V.U.W., Box 600,
WELLINGTON

or NZSA96@ISOR.VUW.AC.NZ

For Registration Form and Fees, please see facing page.

NZSA 1996 Conference Registration and Fees

We would welcome hearing from you as soon as possible, but registrations will be accepted at any time until the day of the conference. Note a late fee of \$10-00 now applies to all registrations.

Name and Title: _____

Address: _____

E-Mail: _____

I wish to present a workshop ___ or paper ___ (please tick).

Title of workshop or paper: _____

Note that all Registrations include proceedings, lunches and morning and afternoon teas, but not dinner or accommodation.

Registration (both days)	\$85.00	\$ _____
Registration (one day)	\$55.00	\$ _____ Friday/Saturday (circle one)
Student Registration (both days)	\$55.00	\$ _____
Dinner (Friday, Staff Club)	\$35.00	\$ _____
Late Fee (30 July 1996 onwards)	\$10.00	\$ _____
TOTAL:		\$ _____

Payment by cheque (made out to 'NZSA') is preferred, and payment by credit card is acceptable. All prices are in \$NZ and include GST. Note that the NZSA is not GST registered.

For Credit Card payment (Mastercard/Visa), please give:

Cardholder Name: _____

Card Number: _____ Expires: _____

Signature: _____ Date: _____

Please return this to:

Statistics Conference, ISOR
Victoria University of Wellington
P O Box 600
WELLINGTON
NEW ZEALAND

Our email address is: NZSA96@ISOR.VUW.AC.NZ

Aitken Centenary Conference

While the Aitken conference was nearly a year ago it's important for historical purposes to note, and thank, the invited speakers.

Plenary and Invited Speakers

Len Cook: *Influence of Statistics on Public Policy*
Herbert David: *First(?) Occurrence of Common*

Terms in Mathematical Sciences

Peter Fenton: *The Dunedin Years of A C Aitken*
David Forfar: *Some Aspects of the Actuarial Management of a Life Office and Recent Trends in the UK Life Market Which Have Actuarial Implications*

M Ross Leadbetter: *Statistics of Exceedance Measures in Environmental Regulation*
Walter Ledermann: *A C Aitken: His Contributions to Pure Mathematics*

Brian McArdle: *Non-parametric Multivariate Distance Methods in Ecology: an Appraisal*
Graham McBride: *"Difference Versus Equivalence Tests: What's the Difference?"*

Geoffrey McLachlan: *On Aitken's Method and Other Approaches for Accelerating Convergence of the EM Algorithm*
Ragnar Norberg: *Life Insurance Mathematics - Some Recent Developments*

Anne Penfold Street (with J Seberry): *Equivalence of Matrices: Then and Now*
Elmer Rees: *Linear Spaces of Matrices*
Elmer Rees: *Mathematics in Edinburgh*
Hans Schneider: *Aitken's Student: A Personal Memoir*

Shayle Searle: *Some Follow-up on Aitken's Least Squares Equations*

George Styan: *Some Remarks on the Parallel Sum of Two Matrices*
Bjorn Sundt: *On Some Properties of De Pril Transforms*

Gary Tee: *Alexander Craig Aitken 1895-1967*
Jean Thompson: *Professor J T Campbell, 1906-1994*

Ernie Tuck: *Planing Surfaces*
Howard Walters: *Permanent Health Insurance, Cause of Disability and Critical Illness Insurance - Models, Data and Results*
Alistair Watson: *Applications of the Power Method of Computing Norms of Matrices*

The Conference incorporated the Annual Meeting of the New Zealand Statistical Association, the New Zealand Mathematics Colloquium and the Third Pacific Statistical Congress. There were close to 250 participants.

The conference themes were actuarial science, linear algebra and statistics to reflect Aitken's interests. The contributed statistical papers in applied

and theoretical sections of the subject were presented over three days of the conference and on the other two days there were sessions on matrix methods in statistics, statistical ecology, environmental statistics, and statistics education. The NZSA Employment Workshop for Young Statisticians was particularly successful as were the NZSA Case Studies presented by David Fletcher, Jean Thompson and Alan Lee in a session arranged by Katrina Sharples.

The Proceedings of the A C Aitken Conference, containing refereed papers from invited and contributing speakers, will be published early in 1996 by the University of Otago Press. Any one interested in obtaining a copy of these proceedings can contact me for more information.

J A Harraway, Secretary, A C Aitken Conference

International Congress Comes to Australia

It has just been announced that the quadrennial International Congress on Industrial and Applied Mathematics is to be held in Sydney in July 2003. The venue is expected to be the Sydney Convention and Exhibition Centre in Darling Harbour. This Congress is the largest conference in the subject in the world and focuses on the science of applied mathematics and the manifold applications of mathematical science, especially mathematical modelling, solid and fluid mechanics, mathematical biology, chemistry and physics, operations research and industrial mathematics. The host organisation is the group known as Australian and New Zealand Industrial and Applied Mathematics (ANZIAM) which has existed for 20 years as a Division of the Australian Mathematical Society.

The four-yearly Congresses on this theme were inaugurated in 1987 with a meeting in Paris and the subsequent meetings up to 1999 all in the northern hemisphere (Washington DC 1991, Hamburg 1995, Edinburgh 1999). Professor Graeme Wake, Professor of Industrial and Applied Mathematics at the University of Auckland and current Chair of ANZIAM said "The fact that one of the leading Southern Hemisphere groups in Applied Mathematics is able to host the fifth such Congress is a tribute to our contributions to our subject and our organisation. It will provide real boost to activities in the region and put a welcome spotlight on Industrial and Applied Mathematics in this part of the world."

It is expected to attract 2000 participants from around the world. Dr Noel Barton of CSIRO, Sydney has been appointed as Director for the Conference and he will be supported by a large team of colleagues from around the world, but mostly Australia and New Zealand.

July Meeting of the Standing Committee on Mathematical and Information Sciences of the Royal Society of New Zealand

This committee, with representatives from the NZSA, NZMS, ORSNZ, NZCS and the Fellows of the RSNZ, met on 5 July at Science House, RSNZ, Wellington.

The committee was advised that the Electoral College elections have been held up, since the Royal Society Bill has yet to pass through the House (although it is expected to do so before the Election). Graeme Wake advised that he would step down as the Convenor of this Standing Committee after the RSNZ elections.

Reports on the Marsden Fund and the MoRST Knowledge Base project were given by Marston Conder. Once the various area profiles have been finalised it would be appropriate that those on Statistics (prepared by Brian Manly) and Probability and Stochastic Processes (prepared by Jeff Hunter and Mark Bebbington) should be published in the NZSA Newsletter.

Of major interest was the announcement that the Minister of Research, Science and Technology has agreed to the inclusion of a Review of the Mathematical Sciences in the 1996/97 funding round. Although details are not available there was a suggestion by Dr Gerald Rys (in attendance from MoRST) that the review could begin with an expert working group being formed to establish the terms of reference for a review. This group would include representatives of the mathematical sciences community as well as key user representatives. MoRST hopes to be putting together the names for the core working group in the next month or so.

In another item, concern was expressed over the proposed rationalisation of the NZQA Advisory Committees with the establishment of National Standards Bodies. In the new structure it appears that there will be only one representative from Mathematics and one representative from Statistics (Sharleen Forbes has been nominated by the NZSA executive).

It was confirmed that the NZSA Conference for next year will be linking with the NZMS and the AMS at the Mathematics Colloquium at Auckland, 7-11 July.

The Standing Committee is also initiating the development of a WWW home page in coordination with developments already in place at the RSNZ. (Marston Conder to convene.)

Steve Haslett's name has been put forward as an

NZSA Liaison Officer to assist RSNZ committees preparing reports and submissions requiring a statistical input.

Concern was expressed at the low cost category funding of the mathematical sciences in the Universities, and Ross Moore, the CEO of the RSNZ, has agreed to assist in communicating those concerns to the Ministry of Education. (Some degree of coordination between the Mathematics and Statistics groupings in the Universities is required in this regard.)

As Jeff Hunter has been nominated as convenor of the Standing committee, the NZSA will be able to have an additional representative. Currently Jean Thompson is also a representative and a further NZSA appointee will be required from the beginning of 1997.

Jeff Hunter

Cheap Books

Cheap copies of Dave Saville and Graham Wood's new book, "Statistical Methods: A Geometric Primer," can be obtained from Dave at AgResearch, Box 60, Lincoln, at a price of \$NZ 55 (list price is \$US 39.95). This primer explains the geometry behind paired and independent sample t tests, analysis of variance and regression, using four key data sets: heights of mixed-sex twins, heights of male and female students, selenium levels for three groups of humans, and air pollution levels plus corresponding inversion effects. A new angle on the geometry, involving a direct route to the p value, is included in an appendix.

Local News

Massey University, Albany

We were pleased to have Thomas Yee join us as a half-time lecturer at the beginning of the year. Thomas completed his PhD at Auckland, and we have been sharing his services with the University of Auckland. Our fifth statistician, Paul Cowpertwait, arrived at the end of May. Paul hails from Newcastle-upon-Tyne, and his research interest is the modelling of rainfall data. He is currently writing a book on the subject, and was pleasantly surprised to find some useful New Zealand data free of charge (in Britain hourly data is charged for at an hourly rate!). Given the current state of Auckland's weather, rainfall is on the minds of most residents and Paul has already appeared on local radio to talk about his work.

Howard Edwards

Missing

There are lots of statisticians out there who are obviously doing something, but are too shy to let their fellow statisticians know about it. News and announcements are sought by your Newsletter editor, and he's very good at putting them into the Newsletter. So how about before 30 November you email ripenny@stats.govt.nz with the news.

Other conferences attended were IBC Amsterdam by Nye and an industrial statistics conference at Coolangatta by Ray Littler.

Bill Bolstad will get his chance to hit the North American conference circuit when he goes on leave this semester. Jocelyn Dale has returned from maternity leave.

Murray Jorgensen

AgResearch

Roger Littlejohn (Invermay) and Harold Henderson (Ruakura) were among the more than 50 New Zealand statisticians who participated in the Sydney International Statistical Congress in July. It was a great conference with more than 900 registrants.

Harold Henderson is attending the Joint Statistical Meetings in Chicago in August and is an invited speaker at the Conference in Honor of Shayle R Searle, on the occasion of his retirement, which is being held at Cornell after the Chicago meetings.

Peter Johnstone (Invermay) gave a talk at IBC in Amsterdam in July entitled "Row-column design for real experiments". He also spoke to the SEEM 2 Conference in Dunedin 2 weeks earlier on "Assessing the risk to Pèrè David's deer and Red Deer hybrids from Malignant Catarrhal Fever". Neil Cox (Ruakura) also attended SEEM 2.

At Lincoln, the biometricians have moved into the new Grasslands Division with the recent restructuring of AgResearch. David Baird has been working on an advisory panel investigating the possible spraying of part of Auckland for tussock moth control. Dave Saville has been busy running six one-day statistics courses on elementary anova, regression and ancova, plus, at a more advanced level, the associated geometry. His geometric primer with Graham Wood is also finally out (see ad on page 9).

AgResearch maintained a high profile at the 1996 Maths Colloquium. Four papers featured AgResearch authors:

Kao: A herd-based model of Tb control in cattle.

Kopetschny, Lambert, Louie, Springett & Wake: Dynamical systems model of earthworms and litter.

Gandar, Hall & Louie: A continuum mechanics approach to determining the cellular velocity field within a wool follicle.

Roberts: Integral equation models in epidemiology.

*Mick Roberts, Roger Littlejohn, Dave Saville,
Harold Henderson*

Waikato University

The young Waikato Statistics Department has cause for celebration at the end of its first six months of existence with the completion by Lyn Hunt of her DPhil (which is how we spell PhD at Waikato) under the supervision of Murray Jorgensen. This has been a marathon effort by Lyn, especially as it was done in parallel with looking after a pre-schooler, arguing with teenagers, and involvement with large first-year statistics classes. I'll tell you something about what she has done, now that it's all safely finished!

Cluster Analysis has always been a rather odd topic in statistics because it has been treated by purely deterministic algorithms despite being applied to multivariate random observations. Lyn has developed a program that fits a finite mixture of distributions to multivariate data. The variables can be either continuous or categorical. The program yields both an assignment of the observations to groups and a parametric description of each group. A special feature is that it can cope with missing observations.

Anyone who has tried cluster analysis knows how difficult it is to be sure that they have made all the right decisions in setting the analysis up. Lyn's program is very straightforward to use, with fewer and more natural decisions to be made by the user. It has worked well with various real and simulated data sets that it has been tried with.

We still share an office with the Mathematics Department on the third floor of G block, but in 1997 we expect to move to an office of our own on the second floor. Staff offices are on the second and third floors on G block and Jane Andrew, who tutors, has an office in R block.

A big contingent from Waikato made it to SISC-96 in Sydney: Jane Andrew, Kim Bannon, Lyn Hunt, Nye John, Murray Jorgensen, Judi McWhirter, Kathy Ruggiero, and Dave Whitaker along with Harold Henderson from Ruakura and several partners. We were generally very impressed, except with some of the rather heavily-built minders keeping non-badge wearers away from the second floor of the hotel.

Statistics New Zealand

The people recruited in our graduate recruitment round at the end of last year- Christine Bycroft, Richard Daines, Lisa Jones, Steve Johnson, Frances Krsinich, Geoff Kuzmich, Anna McLauchlan, Keith McLeod, Kenneth Mah, Niki Thorne, Alistair Wilson and Chris Zingel, have all settled in - Christine, Niki and Lisa in Christchurch, the rest in Wellington.

Since then there have been some further changes. Vince Galvin is now working for 2 years in the Australian Bureau of Statistics. Judith Archibald is spending a year in Hong Kong. Diane Craig is away on extended OE in Europe. Kenneth Mah has left to go to Singapore. Karen Wong and Troy Kusabs have left to take up other jobs.

Robert Templeton is now Chief Analyst.

Max Wigbout attended the Annual Research Conference of the Bureau of the Census in Washington, and visited the Bureau and Statistics Canada.

Mike Doherty, Tracey Savage, Niki Thorne and Ian Westbrooke attended the SISC in July. Ian and Tracey stayed on to visit the Australian Bureau of Statistics.

Richard Penny is attending the ASA conference in Chicago, and spending the rest of the year on sabbatical in Statistics Canada, working on confidentiality techniques.

Mike Doherty is the only one currently working in Survey Methods/Analytical Support geriatric enough to qualify for long service leave, which he took in Europe.

Len Cook recently conducted an extensive impromptu personal survey of North Island travel. Bussed from Hamilton to Auckland (because of the volcano), he arrived to find Auckland airport also closed. Statistics NZ staff bundled him onto the Northerner in a borrowed woman's overcoat (for warmth), but the Northerner ground to a halt in Taihape. He finally reached Wellington in a rental car.

Mike Doherty

Massey University

Associate Professor Dick Brook is now Head of Department instead of Acting Head. However, he is soon to depart for Sweden for a few months and Associate Professor Hugh Morton will take over as Acting Head of Department during Dick's absence.

Paul Cowpertwait is now settled in at the Albany Campus. Welcome Paul!

Tom Hassard of the University of Manitoba arrived at the end of June to teach a first year statistics course this semester. Tom was a member of the department

in the good years of '81-'85 and will stay with us until the end of August. It is great to see his smiling face again. He left a long cold Canadian winter to come to our long wet New Zealand winter.

Helen Sneddon, our departmental secretary, has left us and moved one floor up in the Social Sciences Tower to become the Head of Department Secretary in the Department of Educational Psychology. We wish her well in her new role. Her replacement, Chamalani Aluwihare has quickly settled in. Chamalani was originally from Sri Lanka. Our department is now truly cosmopolitan, nearly 40% of us are Asians!

Several staff from the Palmerston North campus (Jeff, Hugh, Steve, Greg, Bruce and Chin Diew) attended SISC (in Sydney) during the mid-semester break. Doug Stirling was scheduled to attend but a nasty flu proved too much and he had to sit it out here. Thomas and Denny from the Albany Campus also attended the same conference. Most of the staff presented a talk, including Mark Bebbington who was not even physically there! Greg Arnold is to spend two-months leave in Wollongong after SISC.

After SISC, Hugh gave an invited address, "Regression and Lateral Thinking: Human Photosynthesis and other stories" to the First International Conference on Exercise Science, held at Griffith University, Gold Coast.

Ganesh went to Europe to present a talk at IBC '96 held in Amsterdam. He visited Reading and then Tokyo on his way back.

Dr Min Xie of the National University of Singapore made a short visit to Massey to work with Chin Diew.

At the end of May, Mark Dunning was presented with the 1995 Statistics New Zealand Prize by Len Cook. The prize is awarded annually to the leading Massey University student majoring in Statistics who is proceeding to postgraduate study in the following year.

Seminars presented to the department during the period from April '96 are:

K Govindaraju "Lot resampling in acceptance inspection."

Steve Haslett "Switching regressions: Statistical tests and computational aspects."

Mark Bebbington "Dual constructions for pure-jump Markov processes."

Herman Senter "Production planning to achieve a distribution of sizes."

Min Xie "Statistical process control for high-quality processes."

Paul Cowpertwait "Spatial-temporal point process models of rainfall."

Chin Diew Lai

Canterbury University

The statistics lecturers are just finishing marking the mid-year test for stage 1 students, which showed good results for this year, even though the number of students in each lecture has increased. This is due to the department changing from three streams to two because of the new larger central lecture theatre room. The result of this has been the introduction of a new additional stage 2 course on biometrics. After the second year of replacing Minitab with Excel for stage 1 courses we have found it to be a great success, which can be seen by the rapidity that the students have in learning it (even the computer illiterate). For stage 2, we are turning more and more towards Matlab, although for next year we are considering using Excel for the biometrics course. For stage 3, we use Matlab and SAS, and this year we will trial run a new booklet designed to hopefully make SAS more user friendly for the students.

Our new building has begun (see our departments WWW page for a picture of how it will look upon completion <http://www.canterbury.ac.nz/math/s/building.html>). At present it is just a hole in the ground but is rapidly getting deeper with sometimes two diggers working at a time. The staff enjoy watching the progress as we go to morning and afternoon tea each day.

Nearly 11 years after pen was first put to paper, Frank Lad is pleased to announce the publication of "Operational Subjective Statistical Methods: a mathematical, philosophical, and historical introduction," New York: John Wiley, xix, 484 p., scheduled for the printing press in early September. Although Frank has spoken on the implications of the subjectivist viewpoint for applied statistics at several NZSA conferences, he'll be disappointed to miss this year. He will have discount price copies of the book available by year's end. When a previous lecturer, Graham Wood, completed his book he shortly after left our department for a position overseas, but we hope that Frank will continue to stay with us for years to come.

Our department has recently required a scanner and a video capture machine, in the hope that we will be able to in future create a WWW page for use by students to obtain assignments and even possibly view the lectures. The postgrads have just last term completed a series of seminars on their theses which went well, and shortly we hope to have seminars given by the honours students detailing the research they have done. From these students we will be seeing the future postgraduates for the next 3-5 years.

Julian Visch

Lincoln University

Chris Framton joins the ranks of the rich and famous with a promotion to senior lecturer. Mind you, that wasn't enough to get him off another 'tour of duty' in Malaysia, where Lincoln teaches a commerce degree at a private campus just outside KL. So far this year, the only casualty had been statistics tutor Alison Lister, hospitalised after a bout of food poisoning. A down payment of about \$NZ 900 was necessary before she was even allowed through the hospital doors.

David Fletcher (Otago University) and I teamed up for a double act on Hector's dolphin at IBC in Amsterdam. David came straight from SEEM2 in Dunedin, flying into Amsterdam the day the conference began. For the first few days he looked like Hamlet's father's ghost, but still managed a 40k mid-conference 'Tour des Dykes' by bicycle. [Although had he been tested, his caffeine consumption during the ride might well have led to his disqualification.]

Richard Sedcole waved the flag for Lincoln at the VCC's conference on statistics. He was pleased to find everybody else's students didn't want to know the theory either. And we thought it was just a Lincoln phenomenon...

Jim Young

Contest Number 2

Set by Mr Ree

Well I got six entries. Not a lot I would have thought. However the lucky winner, who should have received their copy of *Facts New Zealand* by now, is Lisa Jones with an *estimate of statisticians*. We liked Russell Boyles a *sampling of frequentists*, but the editor wouldn't spring to a consolation prize, though we have sent all entrants a wee pamphlet, also from Statistics New Zealand.

So another contest for you all. Another very simple one as I want to get you used to this, the Christmas competition will be much more difficult. As many of you know New Zealand has personalised number plates. On a personalised number plate you are allowed any combination of six letters and numbers. So send me your ideas of a suitable number plate for a statistician, be it statisticians in general, or a particular statistician.

The usual rules: my decision is final, a prize of a statistics book (the editor hasn't told me which), you have to be a NZSA member, you can enter more than once. Entries to the editor, who will pass them on to me. If e-mailing put "Contest Entry" in the subject line. Contest closes 30 November. Results in the next Newsletter.