

newsletter

1993 NZSA Conference - it's just around the corner

Registration forms are included in this *Newsletter*.

1993 NZSA Conference August 25-27 University of Canterbury Christchurch

- The NZ Mathematics Colloquium precedes and overlaps (August 23-26).
- The NZAMT Conference "Maths with Class" follows (August 30 to September 3).
- Thursday is a "Maths and Stats in Biology" day.
- Speakers include:

Jessica Utts, UC Davis, An overview of research in parapsychology

Wolfgang Runggaldier, Italy, Stochastic control

Wes Johnson, UC Davis, Cost effective Quality

Control - with applications to HIV testing

Plus an extraordinary line-up of local talent.

Call for Papers

Contributed papers of 25 minutes are eagerly sought.

The closing date for abstracts is July 31.

Send abstracts to:

Graham Wood
Programme Secretary, NZSA Conference
Department of Mathematics and Statistics
University of Canterbury
Private Bag 4800
Christchurch 8001

phone: (03) 364 2690
fax: (03) 364 2999
email: grw@math.canterbury.ac.nz

NZ Mathematics Colloquium August 23-26

NZAMT Conference "Maths with Class" August 30 to September 3

- Wine trail on Wednesday afternoon, mixer on Wednesday evening, dining delights on Thursday evening ... and the NZSA AGM on Thursday afternoon!

Further details are on page 8.

Send the enclosed **Registration Form** to:

Murray Smith
NZSA Conference Secretary
Department of Mathematics and Statistics
University of Canterbury
Private Bag 4800
Christchurch 8001

phone: (03) 364 2690

fax: (03) 364 2999

email: mhs@math.canterbury.ac.nz

nzsa93@math.canterbury.ac.nz

- Registrants attending the Mathematics Colloquium can add on the NZSA Conference for the payment of only \$25, the one-day registration fee.

Dust off those skis and let it all happen!

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President's Column



This is my last newsletter column as your President and I would like to take this opportunity to talk about some aspects of the statistics scene in New Zealand as I have seen it in the last three years.

There would hardly be a statistician in this country who has not been closely touched by the science restructuring process which culminated a year ago in the establishment of ten Crown Research Institutes (CRIs). In parallel with this move was the profound change in government science funding policy which is now affecting non-government statisticians as well as those who found themselves in CRIs.

While there may be some advantages in the new system, I have observed many problems concerning the proper use of statistics in New Zealand science. I had hoped some of the problems I was only too close to this time last year could have settled down. Sadly there appears to be little sign of this yet.

Except in the units where internal statistical assistance was traditionally built into projects, competitive funding has worked against statisticians being included as team members in research projects in other discipline areas. In the words of one statistician, "It's just too risky to attempt to be part of someone else's project. We tried that and got our fingers badly burnt". The division of the national science effort into ten independent and competing units has only served to make matters even worse for interdisciplinary co-operation. Ironically, after years of "patient guidance" and education, the sensible idea of including a statistician as an integral part of a research team was beginning to catch on before all these changes. Maybe, had it been longer established, it could have survived the changed "playing field".

Getting New Zealand business and industry (with a small number of notable exceptions) to consider statistical input *before* being faced with imminent disaster has been another area where much energy was applied prior to restructuring and things were starting to happen. Little has been achieved since. There are at least two problems here. The first I see is that market forces just don't work when the market has no understanding or appreciation of the product. Politicians suggest effective advertising, but leave the discussion before there is time to ask them to estimate the cost of such an effective campaign! The

second problem I see appears to be due to the overly rigid interpretation of "user pays". It is very hard to identify a user when a development is generic and yet undoubtedly falls into the realm of technology transfer, making it unfundable as research. Much of what industry could make good use of falls into this hopeless category.

With CRIs set up as profit-making businesses and having no mandate in the legislation to support or foster the disciplines that underpin their applied science, it is hard to see where the new material to make good science applications in the future will come from, that is unless universities receive massive injections of funds to enable them to do the work and then *give* it to the CRIs. I don't believe that is a very likely scenario! And it is even hard to see how units driven by financial concerns can be in a position to see the value of including a "costly outsider" who could use just today's technology to improve the quality of the science being done. Yet somehow this is the work that must be done. It is painful to sit by and see the New Zealand science dollar being squandered on poorly designed experiments or poor quality investigations. It is equally painful to sit by and see no use of scientific method in administration. I shudder to think of the wastage in that area as decisions continue to be made without suitable and properly investigated data.

We have no voice as individuals. We have no voice through any revered Government Department. Our only hope to get more statistics into New Zealand science would seem to be through the Association. But the "assault" must come from many fronts. Each and every one of us must use every opportunity to let our administrators and others know what could be achieved. And this individual effort must be backed by strong statements from the Association. Administrators, board members and politicians need to have the ideas constantly paraded before them so the words will become familiar to them and in time they might accept the message. Our Association needs to get stronger, with many willing workers prepared to give their time to represent their profession. Making New Zealand science more effective is a goal worth fighting for. I urge you all to "go for it".

Jean Thompson

Did you know that in 1991 the three sister mathematics, statistics and operations research societies in NZ (NZMS, NZSA and ORSNZ) all had women presidents. Is Women's Suffrage year two years late, or are we trend setters.

Education Committee

We're very pleased to have a new member on the committee: Brian Corbitt, of the Open Polytechnic.

Our time is dominated by two current major concerns: ensuring some statistical content in the conference "Maths with Class" (NZ Association of Maths Teachers, August 29 - September 2, Christchurch); and ensuring that statistical voices are heard in NZ Qualifications Authority's Maths Advisory Group and similar bodies.

The "Maths in the NZ Curriculum" (with its strong statistics strand) is to be introduced for all NZ schools next year. Prescriptions for use in forms 5, 6 and 7 are in draft, and we're looking at the statistical content in them.

Mike Camden

The Mathematical Needs of NZ School Leavers: A Research Report

by Gordon Knight, Greg Arnold, Michael Carter, Peter Kelly and Gillian Thornley
is available from:

Ministry of Education (Research Section)
Box 1666, Wellington

It shows that a substantial part of maths in everyday life and the workplace is statistical.

New Zealand Statistical Association

President: C Jean Thompson

Secretary: Alistair Gray

Treasurer: Antony Gomez

Editors *NZ Statistician*: R Hugh Morton

Newsletter: Peter Danaher, Harold Henderson
Committee: Katrina Sharples, Graham Wood, Garry Dickinson, Vince Galvin, Greg Arnold, Jeff Hunter

Subcommittee convenors: Stephen Haslett (SAPQC), Mike Camden (Education), John Waller (Publications), Vince Galvin (Science Fairs), Garry Dickinson (Standards), Greg Arnold (History)

Further information from:

Secretary
New Zealand Statistical Association
PO Box 1731
Wellington, New Zealand
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Editorial

Although the NZSA conference looms big on the horizon, an even bigger event has occurred within these pages. We're talking about Jean Thompson's last President's Column. Jean has been a wonderful president for our association. In her term she has tirelessly pushed for better use of statistics in decision making, be it in politics, education, CRIs or business.

Not everyone has wanted to hear what Jean has to say but she has undoubtedly raised the profile of statistics in many institutions and among many people. She has also worked hard to establish the importance of the science of statistics in FORST, with positive results. Our association will miss Jean for her strong will and devotion.

Part of Jean's legacy remains in the form of a committee to establish standards for statistics and statisticians. This has been a hot topic in Australia and the US and now we are trying to grapple with it. What makes a statistician? A beard, glasses and sandals with socks? A PhD in statistics? These hairy questions are dealt with on pages 4 and 5.

Thank you to all the contributors to the *Newsletter*, without you there would no *Newsletter*.

Finally, we must mention the NZSA conference in August at Canterbury. The programme looks good, the beer will be cold and the skiing is close. Sounds like a good formula for a great conference.

1993 NZSA Conference
August 25-27
University of Canterbury
Christchurch

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Standards for Statistics and Statisticians

A working party of Garry Dickinson (convenor), Steve Haslett, Jeff Hunter, John Maindonald, Katrina Sharples and Dennis Trewin was set up by the NZSA executive committee in December 1992. It was asked to investigate and report on options for the raising of standards in statistics, with particular reference to the accreditation of statisticians and moves overseas in this area.

This report is the result of the working party discussions so far. It has been prepared as a background paper for a general debate by the NZSA membership at the annual conference in Christchurch in August.

Reasons for Having Standards

The reasons are twofold:

(1) The primary aim is to raise the level of statistical practice generally. By its nature statistics is a widely applied discipline. Both statisticians and users of the results of statistical work express concern about how statistics is practised. Users are unsure about the levels of qualification and experience that are required for a statistician to perform adequately in particular assignments.

(2) The subsidiary reason for having defined standards for statistical practice is to raise the awareness in the general public of statistics as a coherent discipline and not just a collection of techniques. This should have the added benefit of attracting able students to the discipline.

Forms that Standards Could Take

Two basic options have emerged:

(1) Formal accreditation or certification of individuals as being qualified to practise statistics. This would be by either formal academic qualifications or experience or most likely both. Allied to this would be the grading of existing qualifications as sufficient to meet the needs of accreditation.

(2) Guidelines of good practice in using statistics in specific fields together with a general statement of ethics or code of conduct which a practitioner would be expected to adhere to.

Overseas Developments

Developments in three countries have been followed over recent months. This aspect is of interest as the practice of statistics is becoming more international with practitioners moving from one country to another. This is most obviously true in the New Zealand context with our common labour market with Australia.

In Australia the SSA is moving cautiously towards accreditation. This is being driven by increased government emphasis on competency standards and the SSA's desire to be able to influence the standards that are set. They have just completed a survey of their members and this shows general support for the idea though it is probably fair to say that the option of guidelines has not received much airing. The survey also reveals a considerable amount of concern about the details of accreditation and the work that is still needed. Accreditation is probably still a few years away.

The ASA in the US has been debating the whole question of certification, as they prefer to call it. From the e-mail discussion amongst the small number who have taken part (about 150) there is general support for the idea, but with a strongly vociferous element of dissent. No general poll has yet been taken but moves are being made to call one.

The RSS in the UK has recently merged with the Institute of Statisticians and this has led to the combined society having two wings. One, made up of Chartered Statisticians, retains the qualification and experience based certification of the IoS while the other has the learned society approach of the old RSS. Members can belong to one or the other and neither has a primacy over the other.

In a recent development the International Statistical Institute is looking into setting up a register of statisticians who have been certified or accredited by their national statistical body. The notion of international coordination of certification standards thus arises.

Advantages and Disadvantages of the Two Approaches

Formal accreditation (option 1) has the following pros and cons:

- PRO
- if accreditation is used widely overseas then having a parallel practice here would advantage NZ based statisticians
 - it would provide identification of statistics as a profession
 - it could help to raise statistical standards
- CON
- likely to be bureaucratic and expensive to administer, even if the basic framework is copied from elsewhere
 - there will be no legal standing to accreditation so the NZSA could find itself out on a limb if challenged
 - benefits flow primarily to those accredited and only indirectly to the users of statistical advice

- may be seen as coercive by some practitioners
- individuals will need to have accreditation regularly updated
- accreditation of courses of training would cut across the work of NZQA and other authorities
- the number of statisticians in New Zealand may be too small to support an independent accreditation system

The guidelines of good practice (option 2) have the following pros and cons:

- PRO**
- able to be adapted to the large range of areas in which statistics are applied
 - should be able to be expressed in terms that lay users can understand and apply
 - will achieve the objectives without the negative overtones of craft guilds and closed shops
 - is a necessary precursor of accreditation if that is the ultimate goal
 - should be relatively easy to formulate (both the ISI and the RSS have developed codes of conduct which should be easily adapted)
- CON**
- may not fit very well with developments overseas
 - not sufficient for those who want letters after their name
 - if a code of ethics is adopted then some degree of sanctions may still be needed for those who break these ethics

Working Party Preferences

Taking into account all the above perceived advantages and disadvantages the working party believes that guidelines of good practice are the way to go, at least initially. Formulating such guidelines will be a valuable way of educating users of statistics, and the practitioners as well, of what constitutes the most effective way of using numeric data to facilitate the making of decisions.

If statistical societies overseas head down the accreditation path then we will need to judge how effective and acceptable accreditation is in practice. We would need to consider the likely costs of implementing accreditation. If we did decide in the future that accreditation made sense then having guidelines for good practice would make the formulation of accreditation procedures that much easier.

As a final point, it may be that a discussion about accreditation and guidelines will widen to one about

whether the NZSA sees itself as a professional society or alternatively as a learned body. In the UK this has been an off and on debate in the RSS for years with the position now being arrived at as an amalgam of both.

Where to Now?

The topics raised in this report need debating by the general membership of the NZSA. There will be an opportunity to do this at the annual conference at the end of August. **The slot provisionally set aside is from 3.00 to 4.30 on Thursday 26 August, immediately before the AGM.**

It is important that a wide degree of consensus is achieved before any further moves are made. If that consensus can be achieved then the NZSA can work towards detailed proposals.

Garry Dickinson

Suffrage Year Project

We had some good publicity after the launch of the display. There was an article and photograph in the *Dominion Sunday Times*, and Megan Clark was interviewed on the National Programme about our project and the new Maths curriculum.

The display is being used mainly in the Science Centres around the country, along with the 'Common Threads' exhibition currently touring. 'Common Threads' is about the relationship between Maths and weaving and crafts. We have had a really good response to the display in Palmerston North where it has spent most of its time so far. We have also been to a couple of careers evenings. A brochure about some of the women we interviewed and their enthusiasm for statistics and numeracy skills is also available.

The display will be in the Wellington Capital Discovery Place until 15 August, then at the Maths Colloquium, NZSA Conference and the NZAMT conference in Chch from 23 August until 1 September. Definite dates for the rest of the year are still being organised, so any help with this will be most welcome. An Auckland coordinator and a South Island coordinator would be really good!

Work is progressing slowly on the book. We desperately need more people with some spare time to put in to this as well.

Further information or offers of assistance:

Helen Stott or Sarah Crichton
 Department of Statistics
 PO Box 2922, Wellington
 Email hstott or scrichton@stats.govt.nz
 Phone (04) 495 4600.

Opportunities - Living Numbers Launch of the NZSA Display on Numeracy

Here is the text of the talk by Jean Thompson, President NZSA.

I would like to start by acknowledging the hard work of the few who put this together and the willing involvement of the many who allowed themselves to be put under the magnifying glass. Specific thanks are due to Helen Stott, who convened the Special Project Committee, to Sarah Crighton, Valmai Copeland and Sharleen Forbes who were also on the committee and to Karen Wong who drafted our very first application for funding to the Ministry of Women's affairs last year when the idea was still just a glint in a few eyes. Thanks are also due to our researchers, Anita Lee, Pauline Ngan and Rebecca Forbes. They worked hard and with enthusiasm to make this come together. I also want to thank the New Zealand Statistical Association for covering some of the costs and for the enthusiastic support for this idea given by the executive and the membership at large. It really does help to know a large group of people are right behind you. Of course, without the considerable financial support of the Women's Suffrage Centennial Trust none of this could have happened and we want to formally register our deep appreciation that they could see value in what we were trying to do and were prepared to fund it to show their trust in us.

Then last, but in no way least, we owe a debt of gratitude to the Department of Statistics. At the very outset, Len said "Great - go for it" and we knew that meant it would really happen, because, without the work done by members of this Department it would not have been possible. Len's commitment to changing the status of women is clear to us all and he puts his money where his mouth is. I like that. Thank you Len.

So what is this display all about? Of course if I have to tell you, we have failed! However, you may like to know a little more of what is behind it. Why did we call it "Opportunities - Living Numbers"?

Opportunities are clear enough - we all look for them, and in today's society they are even more important to recognize and act on than they have been in the past. But what do we mean by "Opportunities"? Do we mean giving us the chance for a roof over our heads and three meals a day? - Yes. Do we mean allowing us the chance of gathering a little more than that, assets, travel, adventure? - Yes. Do we mean enjoying every day? - Yes. Do we mean satisfaction? - Yes. Do we mean helping others? - Yes. Sounds

too good to be true doesn't it! Yet these are just some of the aspects of the lives of the 60 or so women our research team interviewed - women living numbers.

How did we choose these women? Our primary aim was to have a group of women whose careers depended on either their use of numeracy skills or on the products of those skills like Official Statistics for example. We cast our net wide and far, and could have included so many more. We tried to keep a balance across age groups and to not let one career path dominate over another. We sought and found wide diversity in ethnic background.

We asked these women things like what mattered to them in their careers, what sparked them off and what would they say to young women following their paths.

Their answers were no surprise to me personally, i.e., the content was no surprise. They talked of joy, of being useful, of having fun and making a good living. I can identify with those feelings. I certainly know the immense sense of joy - the rush of delight that comes when an analysis opens a door through which no-one has passed before. I also know the day-to-day satisfaction of knowing I am part of the steady progress being made in some area of discovery. And I have always had fun! But what was a surprise to me was the consistency with which the same delights were reported. It wasn't just some for some and others for others.

It didn't matter whether the woman concerned was at the dawn of her career, like Keryn Wear on the display here, whether the woman was looking back on what had mattered to her in her life, like Helen Wily, or the whole spectrum of ages in between. It didn't matter what the career was. Working with numbers turned ideas into reality, clarified and solved problems, enabled discovery at the minute detail level through to furthering understanding of the universe itself, helped people live better and have better health, improved the way resources were used, enabled the precious and irreplaceable to be conserved. From all of these positive outcomes what came through to me was a picture of a group of women who felt good about themselves and their place in our society.

This showed itself through quotes like, "I never get bored" "It's ever-changing, I couldn't handle routine" "I like the variety and the opportunities for logic" "It's been a super career" "I'm lucky the kind of work I do is in demand" "It's new, exciting and challenging" "My kids like my workplace" "Nothing is black or white, I can even create some grey areas no-one has heard of!" I like that. There is fun and great confidence showing through.

Another aspect which delighted me was the genuine encouragement that was proffered for young women to follow: "Go for it" "Don't give up when you are married and have children - carry on learning" "You will die learning" "Stay curious about everything" "just do it, find something you like in the field and obtain as much information about it as possible" "Don't take what's presented at first glance as fact" "If there are no women (doing what you would like to do) it doesn't mean you can't do it"

I could bore you by going on, there is just so much there!

Of course, for a visual display we had to make a selection from the vast amount of material we had chosen. We handed this awesome responsibility over to our designers who I would also like to publicly acknowledge tonight. Capiche Design worked very willingly and enthusiastically with us, with a very tight budget and an almost impossible time schedule and they came up trumps. Thank you.

After this launch our display will be shown in the foyer of the Department of Statistics, and in 10 days it will go to the Royal Society to be part of their Science and Technology Week. Then it will proceed on a round of science centres, schools, museums and conferences all over the country until the end of Suffrage Year 1993.

Later this year the NZSA will be publishing a book which will give the full vignettes of all the women interviewed for this project and present the results of our research into the history of women in official statistics in New Zealand in much greater detail than a display could possibly contain. This will be funded by the Association. We hope this publication will be welcomed by schools and other groups interested in the motivation and direction of young people. And we also hope it will be read with interest by the general public as it puts down on paper some very interesting facets of the lives of a few New Zealand women at this point in our history as a nation.

So you can see I am very positive about what we have done, and what we have yet to do. But tonight belongs to our display. Here we see examples of non-traditional careers for women. We need to see many more.

I sincerely hope this display will "turn lights on" for young women and for those who support and encourage them. Numerate skills provide the key to opportunity for the 21st century and women must have opportunities in equal part with men for a happy, balanced society.

So saying, there is nothing left to do but to declare this display launched!

Survey Appraisals and Public Questions Committee

Appraisal of M. R. L. Research Group's surveys to establish preferred ownership for Central Power

The full report is available from Stephen Haslett (Convenor SAPQC). Here is the Summary.

1. MRL Research's survey for Central Power is not able to provide reliable information on the opinions of consumers, or of residents in consumer households, on preferences for options on future ownership for Central Power.
2. Despite the callback procedures adopted by MRL Research, the response rate is low. The response levels make it impossible to know whether the survey results, as given by MRL Research, represent the views of the community as a whole. This issue relates directly to the design and implementation of the surveys.
3. The range of ownership options provided in the Central Power questionnaire downplays a Community Trust, which is seen by some to be the major alternative to the provision of the majority of shares to individuals. The latter is the option advocated by the Central Power Board. The failure to give equal prominence in the questionnaire to the Community Trust and local city/district council options represents a further major limitation to proper interpretation of the survey's findings where they purport to measure community opinion on this issue.
4. The MRL Research survey does not then form part of a reliable basis for any views expressed to the government by the Board of Central Power in the Central Power Establishment plan where those views claim that the Establishment Plan is supported by public opinion. Whether there is or is not a "clear local preference" for one ownership option, as that term is defined in the Ministerial guidelines, has not been established by the survey.
5. The SAPQC notes with concern that Central Power declined to provide technical information that would have allowed a more thorough survey appraisal. MRL Research also declined, following consultation with Central Power. While the detail available has been sufficient in this instance to judge whether the survey is able to meet its objectives, the SAPQC believes that surveys purporting to represent public opinion, especially on contentious issues, should be obliged to make details of methodology available for public scrutiny, preferably in the survey report containing the survey results.

Stephen Haslett, Convenor, SAPQC

1993 NZSA Conference 25-27 August 1993 University of Canterbury

The 1993 NZSA Conference will be held in the Science Lecture Building at the University of Canterbury. The Conference will overlap with the **New Zealand Mathematics Colloquium** which is to be held on 23-26 August. The mathematics education conference "Maths with Class" is being held the following week 30 August to 3 September. On Thursday 26 August, the Mathematics Colloquium and the Statistics Conference will combine for a Biology Day devoted to mathematical and statistical papers of a biological nature.

Programme

A rough outline of the conference activities is:

Wednesday 25 August

morning - Statistics papers
afternoon - free (excursion)
evening - mixer at Staff Club

Thursday 26 August

morning and afternoon - Biology day,
mathematics and statistics papers
late afternoon - NZSA AGM
evening - conference dinner at Staff Club

Friday 27 August

morning and early afternoon - Statistics
papers
mid afternoon - conference finishes.

Registration

A registration form is inserted in this *Newsletter*. The standard registration fee will be \$60, but full-time students will be charged a reduced fee of \$20. The registration fee is payable by 31 July. Registrants attending the Mathematics Colloquium can add on the NZSA Conference for only \$25, the one-day registration fee.

Accommodation

Accommodation for the week 22-27 August has been booked in the University Halls of Residence, 9 Maidstone Rd, for the Mathematics and Statistics conferences. Charging is on a per person per night basis and includes a cooked breakfast. The charge is \$41.25 per person per night with a \$4.50 per person surcharge for a single night stay. Rooms are single

occupancy, but a limited number of twin-bed rooms are available (at double rates). A deposit of \$20 for University Halls accommodation is due by **31 July**.

Participants who are also attending the Mathematics Colloquium are requested to make their accommodation bookings with the Mathematics Colloquium organization only.

A list of alternative motel accommodation in the University area will be available from the conference secretary.

Travel

Ansett New Zealand is offering 30% off the standard economy class airfare for travel to and from the conference. Travel must be completed within the 21-29 August period and can only be booked through Ansett New Zealand offices. When making a reservation quote the authority code TA53791.

Social Activities

Wednesday afternoon is free and in conjunction with the Mathematics Colloquium a tour of several (there are 13 in all) of the more prominent Canterbury wineries is being organized. The cost is likely to be \$20. An alternative (non-alcoholic) excursion may be organized for the same afternoon and if so details will be available later.

On Wednesday evening there will be a mixer at the University Staff Club.

On Thursday evening the Conference Dinner will be held at the University Staff Club. This will follow the AGM with a suitable period for libation in between. The dinner cost will be \$30 per person.

If you are planning to attend the NZSA Conference please send in the enclosed registration form as early as possible.

Murray Smith

NZSA Conference Secretary

Department of Mathematics and Statistics

University of Canterbury

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Christchurch 8001

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email: mhs@math.canterbury.ac.nz

nzsa93@math.canterbury.ac.nz

Call for Papers

Papers on any aspect of Statistics are called for. Contributed papers will be of about 25 minutes duration. Submit abstracts before **July 31** to Graham Wood (address on page 1).

1993 NZ Mathematics Colloquium 23-26 August 1993 University of Canterbury

A circular is available from NZMC93, Mathematics Department, University of Canterbury, Private Bag 4800, Christchurch 8001

Email: nzmc93@math.canterbury.ac.nz

Invited speakers include:

Jim Ansell (Victoria) Shaking, Sand, Scorpions and Seismic Tomography

Noel Barton (CSIRO Sydney) Mathematical and computational modelling for industrial applications

Peter Hilton (SUNY Binghamton) On a class of nilpotent groups and non-cancellation phenomena
Curt Linder (Auburn) Graph Theory and Universal Algebra

Garry Newsam (DSTO, Salisbury, SA) Image compression and the underlying mathematics

Jean Pederson (Santa Clara) Probabilities associated with generalized dice throwing

Michael Stiassnie (Technion) Fluid Mechanics

Maths and Stats in Biology Day

Mike Hendy (Massey) Mathematical problems arising from DNA sequence analysis

Bruce Robson (Lincoln) Mathematical modelling in natural sciences

IBC92 Proceedings

A limited number of copies of the IBC92 proceedings are available at \$NZ 40 for the set, airmail postpaid. The "Invited Proceedings" has 19 published papers in the 10 invited sessions (289 pages) and the "Contributed Proceedings" has 263 abstracts (268 pages) from the contributed programme.

Order from (including payment, NZ cheque, VISA/MASTERCARD):

IBC92 Secretary

Statistics Section

Ruakura Agricultural Centre

Private Bag 3123

Hamilton, New Zealand

Fax (07) 838 5012

Phone (07) 838 5151

Email ibc@ruakura.cri.nz

NZSA Publications

Order form with Newsletter.

Understanding Surveys

Price reduced from \$10 to \$5

post paid in NZ (overseas postage extra)

Nontaxing changes to the constitution

We have had correspondence with IRD about whether we are a non-profit making organization and so exempt from paying tax. They have stated we need to change our constitution in three ways before they would be willing to recognize us as a non-profit making organization. Specifically we need to :

a) add a clause in the constitution: 'to prohibit the organization making any distribution, whether by way of money, property, or otherwise howsoever, to any member, save reasonable remuneration for services performed.'

b) amend clause 14 to ensure that: 'on winding-up no property whatsoever shall be paid to or distributed directly or indirectly among the members of the organization.' At the moment this clause says that 'disposition of property shall be decided at the last general meeting.'

c) amend clause 10 to state that: 'no amendment shall be permitted if it in any way affects the tax exempt status of the organization.'

Clause 10 discusses how the alteration of the rules of the Association are to be carried out.

I believe that a) is what we all have expected of the NZSA. It may mean we need to be careful about providing sponsorship to members e.g. to attend conferences, etc.

I see no problem with clause b). I think it is still sensible to leave it up to the last general meeting to decide how to dispose of the NZSA property, e.g., scholarship fund, left in trust until resurrection of new society, etc, rather than try to write that in to the constitution. On the one hand we hope that the NZSA is never wound up so there is no need to plan for it, except in broad terms. On the other hand I certainly am no seer into the future and don't know what might be the best way of disposing of the funds in x years time. I have confidence that the membership at that time will have that knowledge.

I don't see any problems with clause c). In fact it is useful to have it to remind members that we are a non-profit making organization and that if they wish to change that, they will need to radically change the constitution: i.e. a change of status can't slip in the back door via an enthusiastic Exec.

The Exec discussed this at their meeting in May and agreed to the changes. At the AGM to be held on the afternoon of Thursday 26 August the exec will move to amend the Constitution of the NZSA as indicated in a), b) and c) above.

Alistair Gray, Secretary

The Isaac Newton Institute for Mathematical Sciences

The Isaac Newton Institute was founded in 1992 at the University of Cambridge as an international research centre. The Institute organises four research programmes per year, each lasting for six months. Up to twenty people can participate in a programme at one time, and participation is almost exclusively by invitation. The aim of the programme is to stimulate research in a particular field of mathematics, and one of the programmes for January - June 1993 was "Epidemic Models, Their Structure and Relation to Data". I participated in this programme for the full six months.

The programme began with the "Nato Advanced Workshop on Epidemic Models: Their Structure and Relation to Data", in the first week of January. This conference set the scene for research priorities, and gave visiting delegates and long-term participants a chance to meet and settle into their new routines. The building of the Institute is designed to facilitate communication, with outstanding conference facilities and discussion areas. Long-term participants were assigned to shared offices, mine being with Dr Hans Heesterbeek from the Netherlands and now at Oxford University. The offices are equipped with Sun workstations running Unix and Macintosh Quadra computers, but being used to a DOS environment I had taken my own notebook computer, and only used the facilities provided for wider area networking such as library searches and e-mail, and for hooking up to a printer.

The main body of the programme consisted of seminars by all participants, less formal ad hoc discussions and the formation of working research groups. In mid-March there were two major workshops: "The Ecology of Infectious Diseases in Natural Populations" and "Models for Infectious Human Diseases, Structure and Relation to Data". I was more interested in and involved with the former. The programme ended with a discussion meeting of the Royal Statistical Society where the major findings were summarised.

Statistical participants who might be known to New Zealanders included Valerie Isham, who was one of three programme organisers, Niels Becker and Lynne Billard. There was a strong stochastic contingent led by Ingemar Nasell and Frank Ball. Other participants covered the whole spectrum of epidemiology, ranging from a New York sociologist working on sexual behaviour to a parasitologist working on grouse conservation in Scotland.

The interaction with others was intensive. Through

new insights I was able to start two new international cooperations in parasite population modelling, made many useful contacts and learnt a lot about epidemiology and modelling. One contact led me to visit the CWI (Centre for Mathematics and Computer Science) in Amsterdam and the Netherlands Central Veterinary Institute at Lelystad. The Dutch research programmes are impressive, but we seem to know little about them in New Zealand. Overall I would recommend participation in an Isaac Newton programme as an excellent way to advance one's own research.

Mick Roberts

Rob Pringle AgResearch Corporate Science Manager

Rob Pringle has recently moved to Hamilton as AgResearch Corporate Science Manager. We congratulate Rob on this appointment. He follows a fine tradition of statisticians becoming science managers; including Ken Jury, the CEO of the Dairying Research Corporation and Robin Allen, Deputy Group Director, MAF Fisheries.

Rob holds a PhD in biometrics from the University of Natal and his distinguished career in statistical research was highlighted by his election at a young age to the International Statistical Institute.

In his formative years Rob was a bit of a Matrix nut. His PhD thesis was on generalized inverses, which led to his 1971 book with Arthur Rayner (a NZer by birth) 'Generalized Inverse Matrices with Applications to Statistics', which became a standard reference on the subject.

Rob spent twelve years in Natal, first as Regional Biometrician for the Department of Agricultural and Technical Services, then as researcher and lecturer at the University of Natal. In 1977 Rob and his family moved to New Zealand. Rob lectured in statistics at Massey University before joining MAF in 1980, as a biometrician based in Palmerston North. Rob soon became involved in science management and held a number of senior positions before his appointment to the Levin Horticulture Research Centre where he was both Director of the Centre and Horticulture Science Manager for MAF Technology North Central.

As Corporate Science Manager he has responsibility for science policy and planning and for the co-ordination of AgResearch research programmes. He sees the key element of his new role as adding value to the quality and relevance of AgResearch science programmes.

Email Discussion Groups

I have mentioned before the existence of a number of email discussion groups, such as STAT-L for discussions about statistical consulting and EDSTAT-L, for discussions about statistics education. These groups are made possible by software applications known as list-servers, which can accept an email message from a member of a group and broadcast it to all members of the group. On joining a group you are sent a message telling you how to send messages for distribution to the group, and how to send commands to the list-server to extract further information about the group. Examples of useful commands might be one which would send you a list of names and email addresses of members of the group, and one which would search the group archives for previous messages on a topic. Try to avoid the common mistake of broadcasting to the group commands meant for the list server. Some groups are 'moderated' which means that the 'owner' of the group will first read your message before deciding whether it is suitable to broadcast to other members of the list.

In New Zealand the universities, and other organisations linked to them, have access to the netnews system, which supports an array of about 2000 discussion groups. This does not work through your private email, so that you do not need to cope with the problem of cleaning out your mailbox of accumulated messages every day, at least for groups that you view this way. Some groups, eg STAT-L and EDSTAT-L belong to both systems. Reading the netnews can be a good way of keeping up with what is going on in areas that interest you. For example, the recent proof of Fermat's Last Theorem by Andrew Wiles generated a lot of messages, including outlines of the proof by some of those at Wiles' lecture series. You should be warned, though, that netnews can be addictive: take care to restrict yourself to a small number of groups or you'll run the risk of wasting a lot of time. Shortly there will be a reorganisation in the way in which the statistical groups will appear in the netnews system. A new class of news groups called the sci.stat groups will be created. Initially this just involves renaming some existing groups:

the newsgroup	will become
sci.math.stat	sci.stat.math
bit.listserv.edstat-l	sci.stat.edu
bit.listserv.stat-l	sci.stat.consult
bit.listserv.sas-l	comp.soft-sys.sas
bit.listserv.spssx-l	comp.soft-sys.spss

This change will not affect those who receive any of the listserv groups through email. There are still some

advantages to subscribing directly to a group run by a list server, because you are then able to send commands to it for various purposes as indicated above. It is usually possible to be a member of a group, but to turn off messages being sent to you.

Have fun, but don't tell anybody that I sent you!

Murray Jorgensen

StatLib

StatLib is a large library of data sets, programs, and information relating to Statistics. It is held on a computer at Carnegie-Mellon University and can be accessed via email and ftp. You will find many sets of data, famous and not-so-famous, information about and software for the S and Xlisp-Stat statistical packages, algorithms from 'Applied Statistics', lists of email addresses for statisticians.

To get started using StatLib, send the one line message

send index

to statlib@lib.stat.cmu.edu.

StatLib also has an anonymous FTP facility. Use ftp to connect to lib.stat.cmu.edu and login with user name "statlib". PLEASE send your e-mail address as your password. This will enable the StatLib management to notify you of changes to the software and notify the contributors about who has requested the software.

Minitab List Announcement

A new email discussion group has been established for this subject; it is for discussion of the use of Minitab statistical software in teaching and research in any discipline. It is a forum for users' needs, problems and workarounds, and for the rapid publication of (short) Minitab macros.

It is an open, unmoderated list. To join, just send a one line email message to mailbase@mailbase.ac.uk. This should say

subscribe Minitab Anne Other

except of course that **your** first and last names should replace Anne Other. (Your name must be exactly two words long - no more, no less.) Please make sure your message goes to the address above, and not to me personally, and not to the list itself. (If your request to join is sent to the list, it gets broadcast to list members, rather than being acted on!)

Mike Fuller (Senior Lecturer in Econometrics & Social Statistics) Canterbury Business School, University of Kent, Canterbury, Kent, CT2 7PE, UK; phone: +44 (227) 764000 x.7729; fax: +44 (227) 761187; email: mff@ukc.ac.uk

Coming Events

Statistics in Ecology and Environmental Monitoring

13-17 December 1993

Centre for Applications of Statistics and Mathematics University of Otago, Dunedin

One of the primary aims of the conference is to bring together all interested in these topics, whether they be statisticians, ecologists or managers. As well as invited and contributed papers, there will be a number of workshop-style sessions during which emphasis will be on two themes:

Modelling ecological populations:

- Endangered species
- Pest populations
- Parameter estimation (e.g., capture-recapture models)

Environmental monitoring:

- Design of sampling schemes
- Analysis to detect change
- Use of remote sensing

The Invited Speakers are now:

Mark Boyce from the Department of Zoology, University of Wyoming, who will probably be speaking on some aspects of the population dynamics of endangered species;

Richard Cormack from the Department of Statistics at the University of St Andrews who will be speaking about estimation of population parameters using mark-recapture methods, and the design of large scale environmental monitoring schemes;

Larry Cox from the U.S. Environmental Protection Agency who will be speaking about statistical aspects of some of the schemes now being developed in the U.S.;

Roger Green from the Department of Zoology at the University of Western Ontario who will be speaking about the design of sampling schemes for monitoring and impact assessment;

Lyman McDonald of WEST Inc., a consultant on environmental statistics from Denver who will probably be speaking about key statistical issues in this area;

Tony Underwood from the Institute of Marine Biology at the University of Sydney who will probably speak on some aspects of sample designs for the assessment of environmental impacts.

In addition, contributed papers are invited from statisticians, mathematicians and biologists on any topics related to statistical ecology generally, the dynamics of biological populations, and environmental monitoring. A major requirement is that speakers are prepared and able to address a mixed audience with a range of levels of statistics from quantitatively inclined biologist to mathematical statistician. Abstracts are needed by 30 September. Selected papers will be published in the Proceedings. To be considered for publication, papers must be submitted to the Conference Secretary by 31 October. Three copies are required. Instructions for authors are available from the Secretary. Papers will be refereed before being accepted, accepted subject to changes being made, or not accepted.

Further details about the conference can be obtained from:

The Conference Secretary
Centre for Applications of Statistics and Mathematics
University of Otago
Box 56, Dunedin
Phone (03) 479 7774
Fax (03) 479 8427
Email CASM@maths.otago.ac.nz

STATISTICS '93 27 September - 1 October 1993 University of Wollongong, Australia

The Conference known as Statistics '93 takes place in Wollongong, Australia from 27th September to 1st October, 1993. This blurb answers the two vital questions "Where is Wollongong?" and "Why would I want to go to Wollongong at that time?"

Wollongong (pronounced Wool-on-gong) is located on the east coast, some 80 km south of Sydney. It is the largest city of the Illawarra region, and greater Wollongong has a population of approximately 200,000. The principal industries are steel-making and tourism. There is a frequent and comfortable train service between Sydney and Wollongong; motorists may take advantage of the tollway.

The statistical attractions of the Conference include a conference with three themes: **Quality, Statistical Computing, and Statistical Education**. The Statistical Computing and Statistical Education Strands will finish on Wednesday lunchtime, September 29. The featured speakers in the StatComp

section are Trevor Hastie (AT&T) and Neville Davies (The U.K. Statistics Consortium). Hastie will be giving two one-hour talks and contributing to a session on current developments in S and S-Plus. Other sessions in the StatComp section include Experimental Design, Medical Imaging, and Government Statistical Computing. For further details on the current programme, contact the conference organisers at either the postal or e-mail addresses below.

There are other attractions in Wollongong. The weather will be warm, without being very hot. The University campus is attractive, and convenient to the city. There are miles of beautiful beaches, an adjacent escarpment with pleasant walks and views, and Sydney is easily accessible for those who hanker to visit the big city. The Conference tours on the Wednesday allow registrants and partners to visit the scenic or industrial attractions of the region. Finally, may we remind you that the New Zealand dollar is at its strongest against the Australian dollar for many years.

To obtain more information about the conference, send ordinary mail to Statistics U93, Dept of Applied Statistics, University of Wollongong, Northfields Avenue, Wollongong N.S.W. 2522, Australia or e-mail to statconf@uow.edu.au

To obtain registration and accommodation information, you may also be able to use anonymous ftp from your computer. Type `ftp falin.cs.uow.edu.au` and then use anonymous as your name and your email address as your password. To get to the appropriate directory, type `cd /pub/Stat93`. The command `ls (ell-ess)` will list the available files, which may be downloaded to your computer by typing `get` followed by the name of the file. Use `quit` to leave ftp.

Ken Russell

ICOTS 4 The Fourth Conference on Teaching Statistics 25-30 July 1994 Congress Palace Marrakech, Morocco

A brochure listing organisers of the working groups and a call for contributed papers is available from Alistair Gray or Harold Henderson.

**1993 NZSA Conference
25-27 August 1993
University of Canterbury**

Members' News

Dave Saville

NZ members may have noticed Dave Saville, AgResearch Lincoln, recently on radio and TV3 news talking about the increasing selenium status of Christchurch adults associated with deregulation of the wheat market and possible implications for sudden infant death syndrome (SIDS). Apparently he would have been on TV1 except he was out being filmed by TV3 when they phoned, so a couple of hours passed by, then when they were on their way to Lincoln an LPG tanker fell over on the Lewis Pass highway, so the film crew were helicoptered there instead!

Industrial Research Lower Hutt

We have survived the first year of the Crown Research Institutes and the outlook is bright for the next 12 months.

Kit Withers is nearing the end of a four month visit to the USA in which he has spent time at the University of North Carolina, The National Institute of Standards and Technology, the IBM Research Center, the University of Wisconsin. Chief topics of interest have been extreme value theory, and non-parametric estimation. Kit has been so stimulated by all the contacts he has made that he has generated enough draft manuscripts to keep any ordinary person busy for about ten years. He is currently attending the Stanford Department of Statistics Summer School along with 70 other statisticians from around the world.

We have appointed Russell Boyles, from Portland Oregon, to the vacancy created by Sarah Harper's departure last year. Russell will join us at the end of August. He has a PhD from the University of California at Davis. He has wide research interests in statistical methods and experience in industrial applications. Most recently he has been a statistical process control manager for an investment casting company which supplies the medical and aerospace industries.

David Rhoades

Otago

Our new lecturer, Caryn Thompson, is arriving in August. Plans for the December conference on Statistics in Ecology and Environmental Monitoring are moving along. There has been a good response to notices about the conference from New Zealand and further afield and we are hoping for 100+ participants.

A departmental review earlier in the year went well for statistics so we seem to be doing things right.

Bryan Manly

Christchurch

The department at Canterbury is now officially called the Department of Mathematics and Statistics.

The department was involved in a seminar on TQM at the Town Hall on June 23 to 160 interested participants. Interest in matters quantitative by the business community is definitely waxing locally....is this related to the fact (well known here but possibly not elsewhere) that Canterbury is leading NZ's economic recovery?!

The organisers of the Grand Spectacular for August 25-27 (see pages 1 and 8) are mopping brows at an ever increasing rate. It will be an event to rival what concurrently happens in Florence, so get those papers and cheques rolling down to Graham and Murray.

The department is finally getting rid of Graham Wood - he has accepted a job at the University of Central Queensland, beginning in February, and is looking forward to relaxed evenings sipping G&T's while the cane toads grunt and the crocs croak.

Dick Sedcole attended a recent Management Foundation 4-day TQM seminar and is now revolutionising Lincoln University.

Graham Wood

Lincoln

The AgResearch CRI biometricians, David Baird, Lesley Hunt and Dave Saville, have been having a busy winter coping with routine servicing, writing, and visits to ACC. David Baird's motorbike tangled with a ute which pulled out from a stop sign, resulting in a badly gashed knee, a few nights in hospital, and a few weeks on crutches. That aside, David's Ph.D. is progressing well, with 1993 set to be the year to end all years! Pseudo-ergonomic chairs have been a second source of strife, though names have been censored.

Lastly, Dave Saville and Graham Wood have just finished a "final" draft of their second book, an easy-reading mini version of their first, to be entitled either "Statistical Methods: A Geometric Primer", "Linear Algebra at Work", or maybe even ".....Reveals All" (any suggestions appreciated!).

Dave Saville

MAF Applied Statistics Group

A general game of 'musical chairs' is taking place. Max Wigbout has returned to the Department of Statistics and has been replaced by Peter Lee, a recent Honours graduate from Victoria University of Wellington. David Harte has taken 3 years leave without pay to return to Vic to work for a PhD, appropriately enough on the mathematics of Chaos theory. He is available still for a small amount of

consultative work. We have also been fortunate to entice back John Jowett from the education system. Until he arrives in mid-September, Liz Viggers' retirement has become even more 'partial'. June Atkinson and Soo Cheng are, thank goodness, still here.

Liz Viggers

Massey

Jeff Hunter spent four weeks in the Northern Hemisphere, to get away from some of the Manawatu winter weather, attending conferences in Paris (Conference on Applied Probability in Engineering, Computer and Communication Sciences; June 16-18), Amsterdam (22nd Conference on Stochastic Processes and their Applications, Vrije Universiteit; June 21-25) and Ithaca, N.Y. (Workshop in Applied Probability in honour of Professor N.U. Prabhu, Mathematical Sciences Institute, Cornell University; June 28-29). Jeff's visits to warmer climates this time of the year are getting to be a bit of a habit. Rumours are that he plans a similar excursion again in 1994!

Howard Edwards is off to the Joint Statistical meetings in San Francisco in August. He is also going to the SIAM Conference on Simulation and Monte Carlo Methods and to the ISBA (International Society for Bayesian Analysis, of course!) Meeting.

In the Manawatu summer the action will begin. Three new academic staff are expected. First to arrive, before this *Newsletter* hits the streets, will be Mhaire McHugh from Scotland. She has a Masterate from Strathclyde and is a Fellow of the Faculty of Actuaries. Mhaire has been appointed as a half time lecturer for three years.

Around the end of the year Doug Timmer will arrive from Texas A & M. He is in the Industrial Engineering Department and is just completing a PhD on statistical process control for dependent data.

And there is one returning local. Mark Bebbington, originally from Victoria, now a post doctoral fellow at the University of Queensland, will arrive in January. Mark's doctorate is in applied probability from Cambridge, so at last there will someone in the Department for Jeff to talk to.

With all these newcomers what are the rest of us going to do? Watch this space for the appointment of pioneers to Albany. In 1994 the School of Mathematics and Information Sciences will introduce an endorsed BSc at Albany, a BSc (MathInf) with majors in Maths, Stats, CompSc, OR, or InfSc. The degree also requires a defined minor to ensure that graduates learn how the non-numerate live. In addition to the basic statistics course for this degree, both the 1993 and 1994 cohorts of Business Studies students will receive their statistics inoculation in 1994.

Greg Arnold

Members' News

VUW ISOR

ISOR boosted its cosmopolitan image this term with the arrival of Dr Abel Ige, a visitor from Nigeria, and Hongsheng Gao, a PhD student from China. Abel is working in the sample survey area with Stephen Haslett and Hongsheng Gao is working on optic fibre communication theory with Peter Smith. Both arrivals demonstrate that even the knottiest visa problems can be conquered given sufficient effort. Funding for Hongsheng Gao has come from NZ Telecom who are also supporting Howard Silby, an MSc student working on network reliability with Yu Hayakawa and Peter Smith. Rolf Turner (University of New Brunswick) is also due to visit in July to work with Peter Thomson on (surprise, surprise!) time series.

Another venture generating extra staff is the FORST project established by David Vere-Jones, Peter Thomson and Thomas Mikosch. Funding for around \$250,000 has been granted for the first year and brings with it some postgraduate students, visitors, David Harte and Robert Davies. David will be appointed as an Assistant Lecturer and will follow a PhD programme centred on the FORST project. Robert will be employed on a contract basis also under the FORST umbrella.

An unfortunate consequence of all this activity is a severe shortage of space in ISOR. Jokes about using tents on the top of the Cotton Building are ceasing to seem so funny.

The dreaded word "administration" has been much in evidence lately. With David about to go on conference leave, a new chairperson has to be elected and will face the difficult task of following on from David's excellent three years of leadership. In addition there have been moves afoot to create advisory boards to help in the running of ISOR's internal and external consulting programmes.

It seems that the conference season has begun with Megan Clark heading off to Italy for the inaugural IASE meeting in August and to Sweden for an ICMI (International Commission on Mathematical Instruction) Study Group on gender issues in mathematical education. Megan is also busy as head of the Mathematics Education Unit which has been granted approval to expand into a Mathematics and Science Education Unit and to acquire more staff from the Wellington College of Education/University Faculty of Education. David will also attend the IASE Conference and plans to spend a month working at Montpellier in the South of France. Ray Brownrigg was Program Coordinator for the Uniform NZ 1993

Conference and brought off a coup in arranging for Ken Thompson, the original author of Unix, to attend and give a presentation.

On to the social scene, we had a successful quiz night with questions ranging from "What is Renner's middle name?" to "Who sang Monkey Man?" An epic soccer clash between ISOR and the Department of Statistics resulted in a 5:1 (or was it 6:2) victory for the Auld Enemy despite ISOR fielding 13 people at various stages. Thomas Mikosch was impassable as the iron man of the ISOR defence. Perhaps our most important recent claim to fame is the progress of Stuart Turner (ex ISOR Teaching Assistant and graduate student) who is reported to be coaching the Dutch Women's Cricket Team in Amsterdam. And who said statisticians lead boring lives?!

**Statisticians may be dull ...
but we have our moments.**

Department of Statistics

Since the last newsletter we have advertised several mathematical statistician jobs. The first of these people to start will be Tracey Savage in July.

In August Helen Stott will take parental leave. Her child is expected at the end of August. We wish her an easy birth and hope she and Alistair Gray, NZSA Secretary, adjust quickly to the new demands on their time, energy and patience.

In May, the Swedish statisticians Sarndal and Swenson visited us and talked to local NZSA members about their investigations into applying quality management principles to data collection and processing.

In the first week of July, Gerard Salou from the OECD (but currently working in the Australian Bureau of Statistics) visited and talked about Composite Leading Estimators. The content of his talk attracted members with more economic interests. It was encouraging to see the variety of people maintaining an interest in NZSA activities.

Modesty almost forbids reporting on the results of a recent soccer match with ISOR. Needless to say the NZDoS triumphed but the lack of goalposts meant that there were sizable error bounds on each team's score.

Vince Galvin

Invermay

Peter Johnstone has recently departed for South America on his latest mountaineering expedition. He hopes to take in Bolivia and Columbia, and whatever else fate and customs officials allow.

Roger Littlejohn

The University of Auckland



Even though it has been a mild winter in Auckland, a large proportion of the statisticians have earned frequent flyer points by trotting off overseas. Leading the charge was Ilze Zeidens who has just returned from a triple whammy of conferences in Paris, Amsterdam and Oxford. Robert Gentleman is off to the ASA conference in San Francisco and hard on his heels is Alastair Scott headed for the ISI conference in Florence. Chris Wild is still in Waterloo and Chris Triggs is working hard in Seattle. To compensate for all the departures from Auckland, Peter Smith from RMIT has arrived for six months as part of his sabbatical. Last week he was seen contemplating using TEX on a Mac instead of a PC. Patricia Metcalf has just had her PhD approved by the higher powers at Auckland University. Alastair Scott and Chris Wild were her supervisors. Lastly, Terry Quinn has returned to Alaska. He heard the Auckland winters were worse than those in his home territory and took off in fright.

The University of Waikato



Jocelyn Dale, currently living in Thailand, has accepted a lectureship in statistics at the University of Waikato. Jocelyn is a previous editor of the *New Zealand Statistician* and a former member of the staff of the DSIR Applied Mathematics Division substation at the Mt Albert Research Centre. Her PhD from Imperial College, London, was concerned with problems of statistical inference in sparse contingency tables. She has interests in industrial statistics and in the wider dissemination of statistical ideas and thinking in society. Jocelyn will take up her appointment in February 1994. [Incidentally, when she does the Maths and Stats Department and the Waikato Centre for applied statistics will then have 4 members who have previously worked for the DSIR in Mt Albert: I'll wager you can't name them all!]

Ray Littler spent two weeks in May with the Mathematics Department at Monash University, Melbourne. In addition to giving a couple of seminars on industrial statistical topics and exchanging notes with Phil McCloud on statistical consulting, he visited applied statisticians at CSIRO, Victorian Dept of Agriculture, and Victoria University of Technology. The Centre for Applied Statistics hopes to entice some of the Melbourne industrial statisticians to deliver the annual applied statistics workshop next year.

Nye John is on study leave at the University of Queensland until October.

Bill Bolstad and Harold Henderson will attend the ASA meetings in San Francisco in August. Harold goes via Cornell and Minnesota; Bill leaves via Stanford and Minnesota. Dennis Cook is the common Minnesota link.
Murray Jorgensen

Ruakura moves

Rhonda Sutherland joins the Ruakura statistics team, at the Dairying Research Corporation, having worked at the Livestock Improvement Corporation just across the paddocks for the past year.

Isabelle Gravett has retired after 11 years at Ruakura. We will miss her as a warm supportive colleague and for her broad practical and theoretical knowledge. We wish her well on her retirement.

NZSA Membership Application

I wish to join the New Zealand Statistical Association (Inc).

Name:

Address:

.....

.....

Phone:

Fax:

Email:

Occupation:

Areas of Interest: e.g., Experimental Design, Time Series, Stochastic Processes, Official Statistics, etc.:

Membership category:

NZ ordinary members \$30

Overseas ordinary members \$35

Student \$15

My membership subscription is enclosed

Signature:

Date:

Members! Photocopy this application and give it to a friend!