

## Annual NZSA Conference

**28-30 August 1991**

### Victoria University of Wellington

The conference will be held in the Maclaurin Building at the Victoria University of Wellington, in Kelburn near downtown Wellington.

The conference will begin with an informal Cheese and Wine Party on the evening of Tuesday August 27. There will be a full program of invited and contributed papers and the conference dinner will be on Thursday evening.

Hostel accommodation will be available in Weir House, five minutes from the venue, and rumour has it that the rooms have just been refurbished. That's the good news, the bad news is that many of the hostel rooms are either doubles or connected singles. Motel accommodation is also available and a list of possibilities is available on request.

Here's to an enjoyable conference !

### First Notice and Call for Papers

Papers are invited on all aspects of statistics. Each paper will be allocated about thirty minutes. Please submit abstracts before June 27 to:

Dr P J Smith  
NZSA Conference Secretary, ISOR,  
Victoria University of Wellington,  
PO Box 600, Wellington.

email: [jeff@isor.vuw.ac.nz](mailto:jeff@isor.vuw.ac.nz)

Also see the enclosed registration form.

## 1991 Census

The 1991 Census of Population and Dwellings has just been taken. The responses from the 4.6 million questionnaires are being processed by the Department of Statistics in Christchurch, where 150 temporary staff have joined the team for 12 months.

Provisional counts of population and dwellings from the Census are scheduled for release on May 31. From August, Key Statistics will be released, region by region, on basic population characteristics such as location, age, ethnic group, employment and unemployment. Reports containing final information from the Population Census will be released from January 1992.

Regional reports containing a wide range of information for the territorial local authorities and area units will be released progressively. The regional reports will be followed by regional and national summaries, with the latter containing many comparisons of information between the 1986 and 1991 Censuses, as well as the first cross-classifications of information from the 1991 Census.

A range of topic based reports, such as labour force, households and families and the New Zealand Maori population, will be published from May 1992.

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## President's Column



Those Association members who work for the organizations to be disestablished and restructured into Crown Research Institutes (CRIs) have had this imminent change very much in the forefront of their

minds recently.

It seems to me the restructuring provides an opportunity to have statistics more widely recognized and valued and we have been moving to use this opportunity.

The executive have jointly collaborated on a submission to the Science Working Group about the need for CRIs to use statistically sound data, analysis and inference in both their management and their science.

We are still trying to get an audience with Simon Upton, without success yet. In this we wish to address the following issues:

1. To discuss the necessity of raising levels of awareness of statistics in our society.
2. To advocate that the NZSA be used (by the Minister) as a source of rapid feedback on statistical issues.
3. To set up on-going direct links between the NZSA and the Minister.
4. To encourage the Minister to expect and demand from his policy advisors, statistically competent analysis of data.

This is all part of the plan to "put statistics on the map".

As usual our committees have been working hard and their reports appear elsewhere in this *Newsletter*. The executive is very grateful for all the activities that go on outside of their immediate sphere. The more members get involved in Association business, the more effective our Association will be.

As before, I invite you to write to me with your ideas and concerns for the direction of our profession and thank all of you who have communicated with me since our last *Newsletter*.

Jean Thompson

## Summaries of two Submissions to the Science Working Group from the Executive of the NZSA

### A Case for a Mathematics and Information Technology Institute

If mathematical science research were to be located within a specific scientific discipline a significant barrier would be created to its full applicability within other disciplines.

Therefore, we recommend the establishment of a Mathematics and Information Technology Institute.

The broad mission would be to enhance the effectiveness of all CRI research and the competitiveness of the New Zealand economy by:

1. The development of applicable mathematical science;
  2. The application of mathematical sciences to research and the problems of business, industry and the public sector.
- Efficiently achieving this mission needs a group of about 30 - 100 mathematical scientists. There would be a central group with others contracted out to CRIs, business, industry and public sector organizations for well-defined periods of time.

### Statistical Methods for Decision Making in Science

We are concerned to see excellence both in the management of science, and in the day-to-day practice of science.

Therefore we recommend that provision be made in all Crown Research Institutes to have excellent information systems throughout all facets of their operation.

1. Excellence requires systems that will ensure the quality of the data that is available for decision making. Such systems must be supported by high quality analysis and interpretation.
2. Among the factors undermining effective management information systems, and measurement and monitoring systems is poor quality data.

3. Effective procedures for gathering and using information for management purposes, based on a 'continuous improvement' philosophy, should be part of the management process.

4. Large improvements in scientific productivity will come from improvements in the skills that are available, and in teamwork mechanisms for bringing these skills together.

5. Statistical experimental design is the mathematics of experimental cost-benefit analysis. Its potential impact on the practice of science is still far from fully realised.

### The Place of Statisticians in CRIs

Discussions of where statisticians should fit in the new CRI structures has centred around two conflicting demands.

The first is that statisticians need to be close to their clients. We can contribute more effectively to scientific research when we are seen as integral parts of their research, from beginning to end, when the structural barriers between us and our clients are minimised and when we have a real commitment to each other. Also, statistical research is more likely to be genuinely relevant.

The second is that statisticians need to work together. Larger groups can share and develop expertise, ensure "renewal" of skilled staff, afford better tools, ensure a continuity of skilled service to their clients, and ensure that a breadth of skills are applied. Small groups, especially of just one person, risk stagnation and their clients face an uncertain service.

The Ruakura statisticians' submission placed a high emphasis on the first of these demands but also stressed the need to strike a balance between the two. We want to remain in the same organisation as our clients and therefore want no part in an information sciences institute. We recognise, however, that the balancing of the two demands may well require different solutions in different locations. Thus the formation of an information sciences institute for those in Wellington may be the best way to maximise their effectiveness; it is certain, however, that the scientists at Wallaceville would take a very dim view of seeing their statisticians separated from them and other CRIs in the region may also want to have their own statisticians.

Neil Cox

### Editorial

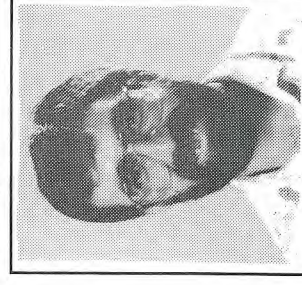
We begin 1991 with a debate on how to accommodate mathematics and statistics in Crown Research Institutes. Although the formation of CRIs does not affect all our members directly it has forced those in the DSIR and MAF to think about the current status and also the future of statistics in New Zealand. All statisticians are fully aware of their worth and many scientists have also seen the irrefutable importance of statistics and statistical thinking in experimentation. However, while we may be smug in knowing our own value we need to prove our worth to politicians and high ranking Government officials. Jean Thompson has made steps in this direction and Simon Upton will surely agree to see her one day. Perhaps you can remind him that a lot of statisticians work on medical research Jean - you may get to him that way!

On the near horizon is the NZSA conference at Victoria University. This is the first time the conference has returned to Wellington since the Association decided to decentralise its conference five years ago. We hope they can put together a fanciful homecoming. Do you think Simon Upton might want to lead a parade?

We would like to congratulate the Department of Statistics for a very entertaining ad campaign for the Census. In fact, the Census attracted quite a bit of media attention - it all helps to give Statistics a higher profile.

Please send contributions for the July *Newsletter* to

Peter Danaher	Harold Henderson
Dept Maths & Stats	Statistics
University of Auckland	Ruakura Agricultural Centre
Auckland	Hamilton
Email: Danaher@mat.aukuni.ac.nz	
	HendersonH@Ruakura.maf.govt.nz



## Statisticians and the Reorganisation of Science

Government Science is to be re-organised, again. The official statements on what is now planned have the ring of sense about them. There seems a real will to cut through the paper-shuffling of the past several years, and to set up the new organisations in a way that will leave scientists free to get on with science.

### More Room for Mavericks

One view of what needs changing appears in 'A Survey of Science' p.14, a supplement to the *Economist* for 16 - 20 Feb 1991: '...to get results from science, taxpayers and industry should be financing the cocksure, disrespectful, self-regarding mavericks who work at the edge of ignorance, not the tedious time servers and comfortable bureaucrats cataloguing the facts in normal science .... A sceptical attitude to the claims of mavericks is fair enough, though. Anyone can be a maverick. Not many people can make a breakthrough ...'

Effective mavericks have good methods for working with ideas. We should claim such methods, in line with comments that I've heard Nye John make, as statistical methods for working with ideas. They are a necessary and proper part of statistical methodology.

Given an adequate and continuing supply of ideas, progress depends crucially on getting accurate, relevant, interpretable data. It depends also on accurate interpretation. It depends on the thinking that goes into getting the data, and on the thinking that goes into analysing it.

### Science Management

Good management decisions require accurate and timely data. Not any data, but the data that really counts. As Deming repeatedly emphasises, too many of our current management styles and practices are guaranteed to ensure that a thick cloud of fog obscures any chance of getting the information that really matters from those lower down the organisation. Pressures to distort, to varnish the truth, or to avoid embarrassment by maintaining silence, are just too strong. 'Getting at the facts' requires pooling the skills and ideas that all relevant experts may have to

contribute. There are the professional experts, and we want the best we can get. No less important are the insights that the shop floor workers may have to offer, because they were there to see it happen, or know from long experience what their bosses have never thought to ask them.

### Measuring the Measures that Measure Performance

One danger is illustrated by an apocryphal story in which a nail factory was assessed by the weight of its output. All its resources were used to produce one enormous nail. Easy measures of performance are a dangerous substitute for the measures that matter.

A recent article on 'The Use of Performance Indicators in the Public Sector' makes one further, important, point. 'In the end the fundamental criterion by which the systems should be judged is whether their benefits outweigh their costs.... There are obvious direct costs associated with performance indicators, and we have tried to indicate that there might be very considerable indirect costs. Yet no attempt has been made to evaluate any of the initiatives implemented so far on sound economic principles. Instead, it is an act of faith that provision of information will result in improvements in services which outweigh all the costs involved.' [Peter Smith, *JRSSA*, 153: 53 - 72]

### Where is your data?

Such acts of faith will not do. As Brian Joiner is fond of saying: **In God we trust. All others must bring data.** Cost-benefit analysis must be used also on the systems by which science is assessed, and indeed on all management systems. Statisticians, even more than other scientists, must bring financial data within their pur-

view, and learn to reckon with such arguments. It is well to remind managers that statistical experimental design is the mathematics of experimental cost-benefit analysis.



John Mairdonald

## NZSA Activity Throughout New Zealand

If you have to reduce things to their barest terms the NZSA activities that affect most members are the annual conference, the *Statistician* and the *Newsletter* (in that order? ed.). Actually that's not too bad when you think about it. Many professional societies do a lot less.

But there are a lot of things happening statistically around the country, and all those who could benefit do not always get to hear about them because the activities take place within the framework of particular institutions. There are other reasons why statisticians in places like Wellington, Christchurch, Hamilton, etc. should get together. There is a lot of experience that can be shared which will deepen the knowledge of everybody and strengthen our profession.

At the last Executive meeting the NZSA decided that it would provide local contact persons with a small 'petty cash' budget for mailouts/publicity and a list of names and addresses of NZSA members in their city/region. As 'local groups' coordinator I am seeking the names of persons interested in taking on the role of local contact person in Auckland, Hamilton, Palmerston North, Wellington, Christchurch, and Dunedin. Graham Wood has already volunteered to be local contact person in Christchurch.

Although the NZSA proposes to set up this network centrally, it would, of course, work in with any region that decided to organise itself as a local branch. In the absence of this level of organisation, however, I would appreciate interested potential contact persons to contact me at the Department of Mathematics and Statistics, University of Waikato. [Phone (071) 562889 extn 8328 or by email: maj@waikato.ac.nz].

Murray Jorgensen

## Email Liaison

At a recent meeting of the NZSA executive the possibility of communicating with overseas statistical societies on matters of mutual interest was raised. All have a common interest in raising the profile of statistics. Documents prepared by one statistical society [eg, as submissions to a legislative or departmental committee on the place of Statistics in the school curriculum or in government research institutions] would be very helpful to other societies involved in similar advocacy.

Another example of documents that might be worth exchanging could be impassioned outbursts from members on situations that the feel strongly about - perhaps an area that too many statisticians are neglecting, or a poor management practice that is frustrating the good practice of statistics.

The executive have asked me to take on the role of Email liaison with overseas statistical societies. I will work in closely with the *Newsletter* editors as we will often find the same material of interest. Please let me have copies [preferably by email or Macintosh disk] of any material that you consider will be of professional interest to overseas statisticians. I would also be interested in names and email addresses of suitable international contacts.

Murray Jorgensen [ maj@waikato.ac.nz ]

## War in the Gulf

The population of N.Z. is 3,155,000 and that of the US is 237,640,000 (Reader's Digest *Atlas of the World*, 1982), which is 75.32 times greater. They have sent 800,000 to the Gulf war zone. To make an equal contribution proportionally, we need send only 10, not the proposed 52. We seem to have an inflated idea of our responsibilities. The great powers, similarly, appear to expect a disproportionate and inappropriate contribution from us. This is what comes of our massive involvement in previous wars. It is time for us, and them, to be realistic.

(Dr) P.F. Wells in the *N.Z. Listener*  
I've heard of dropping your h's, but dropping your O's?-ed.

## Roger Mead in NZ

Roger Mead is spending most of a one-year sabbatical from the University of Reading at the University of Otago. Roger is Professor of Applied Statistics at Reading, where he has been for 25 years, and is also the Secretary of the International Biometric Society. The Department of Applied Statistics of Reading is known not only for its involvement in statistics in many applied areas (clinical trials, agriculture, especially in the tropics, epidemiology and veterinary epidemiology, genetics, meteorology and linguistics) but also for the associated Statistical Services Centre which provides consultancy and courses on a commercial basis in UK and overseas.

I arrived just in time for ICOTS3 and for what we have since realised was the wettest week of our stay in Dunedin. The roots of my visit to Dunedin were initiated in conversations with Bryan Manly at the previous ICOTS and it was pleasing to join in the success of Bryan and his team at ICOTS3. I thought there had been a good deal of progress since ICOTS2 in Victoria; the use of computers in statistics has at last got beyond the excitement of demonstrating the central limit theorem (!); there were even indications that some people in universities were thinking seriously (and radically) about what should be taught; if this is allowed to continue we might even begin to convince people that statistics is a practically useful subject and not just a branch of mathematics.

At the University of Otago I have done, and will again do, some teaching of experimental design to third year students. I am also about to teach what I hope will be an interesting one week course (for paying customers) on multiple measurements and multiple experiments. In many ways this course represents a great deal of my activities in New Zealand. The central stimulus for the course is that, whereas we teach (and textbooks follow faithfully) the analysis of a single set of data from a single isolated experiment, practical experimenters and the statisticians who work with them know that this simple situation is unrealistic.

Experimenters take several measurements, sometimes very many, almost continuous, measurements. How do we assess the interdependence of the different measurements and interpret the analyses correctly? A central question is "If the analysis of two different measurements gives very similar patterns and similar weights of evidence about treatment effects should we multiply the probabilities or are we just looking at one set of information twice?"

No experiment is an island, isolated from other research information. Many experiments are parts of sequences or sets of multi-located trials. Again the problems of analysis, and design, for multiple experiments are under-researched and under-taught.

Part of my financial support during the eight months we are in Dunedin is from MAF. This allows me to escape out to Invermay one day a week to work with Peter Johnston, Ken Dodds and Roger Littlejohn. Peter and I have developed various new ideas in the analysis of data using both additive and multiplicative contrasts. Some of the methods are being tried out on large-scale international trial data from CIMMYT (Centro Internacional de Mejoramiento de Maiz y Trigo) and we shall be presenting some results at the Australian Statistical Society meeting at Coolangatta in July. Also at Invermay I have been involved in routine consultations and have given two seminars (on multiple measurements and experiments) to the institute staff; Peter and his team have an excellent statistical education programme.

In accepting the MAF support I had to agree to the condition that I visit other MAF institutes and consequently extend my natural inclinations to explore New Zealand; MAF drives a hard bargain! So we have been to Wallaceville, Levin and Flock House, to Ruakura, and (by the time you read this) to Lincoln. And of course to Massey, Waikato and Lincoln Universities. I think the seminar score stands at thirteen. Perhaps more interestingly there have been many interesting discussion sessions about a very wide range of agricultural research problems. We have also inspected (and been inspected by)

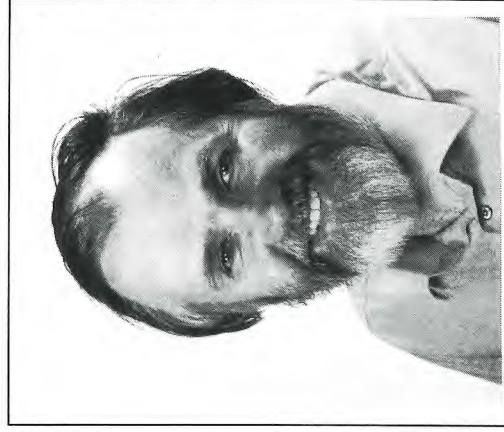
alpacas, water-buffaloes, kiwifruit, asparagus, milking sheep and truffles (+ dog).

The visit to Ruakura gave me a valuable opportunity to discuss and inspect the facilities and prospects for the 1992 International Biometric Conference. I was delighted when the Australian region proposed that the IBC should be at Hamilton (I also take a perverse delight that the next IBC in 1994 will also be in Hamilton) and was equally delighted with the facilities - possibly the best I have seen, and comparing advantageously with Budapest, Namur, Seattle, Tokyo, Toulouse and Guaruja. I hope we can make the IBC a great success.

A very pleasant interlude was being involved in the University of Otago 'Hands-On Science Week' in which 16 school students explored the statistics of medical diagnosis, agricultural experiments, probability games and queues at car testing stations.

On the wider, non-statistical, scene we shall take back wonderful memories of open skies and brilliant landscapes. We have given up counting how many New Zealanders have asked us what we think of the country - why are you so desperate to be assessed (? approved of?) Do you really want to know our impressions? (please send stamped addressed envelopes). We have been made extremely welcome, particularly on our travels by Sandie, Greg, Neil, Harold and David, and if my statistical memories of this sabbatical are as satisfying as our memories of hospitality then the eight months will have been very beneficial.

Roger Mead



## 1990 Science Fairs

During 1990 the NZSA judged at sixteen of the N.Z. Regional Science Fairs. To enhance the level of statistical awareness within the primary and secondary school system a statistics prize was awarded. The statistics prizes were jointly sponsored by the NZSA, Department of Statistics, DSIR-AMID and MAF.

The winning exhibits showed good use of data from a variety of topics. Some of the winning titles were: 'Analysis of a Flying Kite'; 'Dung in the Garden'; 'Absorbency of Toilet Paper'; 'Do Coke and Mental Stress Affect Blood Pressure?'

The NZSA and the organisers of the Fairs thank the judges for doing an excellent job. Some of them travelled considerable distances and have judged at Fairs for several years. The 1990 judges were Peter Alspach, Greg Arnold, Gwen Bush, Isabelle Gravett, David Harte, Lesley Hunt, Peter Johnstone, Mark Kimberley, Linda Nicholls, Wayne Oulaghan, Terry Reid, Michael Ryan, Joanna Stewart, Helen Stott, Andrew Wallace, John Waller and Max Wigbout. Your help was most appreciated.

David Harte

## Education Subcommittee

A Statistics Day is being planned for Wednesday, September 4, in the NZ Association of Mathematics Teachers Conference, 'Maths Across the Spectrum' (Victoria University, September 1-5 - the week after the NZSA conference). We hope to include:

- straight-forward applications of statistics in 'real life'
- workshops on statistical and spreadsheet software
- a bright-ideas pool
- debates like 'Most of maths is actually statistics...'
- living histograms and scatterplots
- statistics in dance

Another target is to help statistics education serve the needs of both Treaty partners. A set of profiles of statistical workers in Maori issues is in preparation, thanks to Manatu Maori staff and Bill Barton. A Maori-language statistical poster competition for secondary students is planned for display at the NZAMT conference and possibly at our own conference.

We hope to investigate whether tertiary statistics courses are being funded fairly within the cost-category system.

We welcome Peter Fleming, now of Taita College, to the committee.

Mike Camden

## Science Magazine Seeks Information

The *N.Z. Science Monthly* provides an informative, readable look at New Zealand science and technology. It is read by everyone from secondary school students to academics, and aims to provide information of substance in a non-technical manner. The magazine covers a broad range of subjects - including feature stories, opinion pieces, conference announcements, new technology developments and book reviews.

We welcome submissions from researchers, engineers and interested parties about their work, their ideas and their concerns. This is a chance to reach the general public and assure them that science is alive and kicking in New Zealand.

Copies of writers' guidelines are available on request as are free evaluation copies of the magazine itself.

Write to: Vicki Hyde, Editor, N.Z. Science Monthly, PO Box 19-760, Christchurch 8005.  
Ph. (03) 845-137. Fax (03) 845-138.

## NZSA Publications

The NZSA has published several booklets on various topics in statistics. These booklets have been very popular in schools. A few copies of these books are still left and can be ordered from the publications committee. The titles and prices are given below.

Title	Price
School Projects in Maths & Stats Statistics at Work	\$2.50
Understanding Surveys	\$10.00
A History of Teaching Statistics	\$12.50
The Data Bundle	\$7.50

Please note that the price includes postage. Anyone in Australia can order the booklets, at the same dollar amount in \$. All other countries please send an international bank draft for the same dollar amount in \$US.

Send all orders to:

N.Z.S.A. Publications  
c/o John Waller  
Ruakura Agricultural Centre  
Private Bag 3080  
Hamilton  
New Zealand

## Massey TV Broadcasts

This year Massey TV will be broadcasting six 15min statistics programs. These will be extracted from the 'Against All Odds' series described by David Moore at ICOTS. Massey TV uses TV1 transmitters at 6.30am on Fridays during the university term. The intended dates and times are listed below, but these should be checked in the *Listener* before you set your alarm clocks:

Date	Time (am)	Topic
5 April	6.55	Describing distributions
10 May	6.30	Normal calculations
7 June	6.30	Samples and surveys
12 July	6.45	Sample means and control charts
9 Aug	6.45	Confidence intervals
23 Aug	6.30	Describing relationships, regression



## Members' News

### Stats Dept- Maths Stats Branch

Shirley Dixon has returned to the fold, as a Senior Mathematical Statistician in charge of a section whose work has a large external client base. Her marketing skills will be handy!

Our Sun has arrived so we are slowly connecting to some of the other possible worlds. I should be able to give you my email address in the next *Newsletter*.

In April the Department is hosting the biennial discussions between our senior managers and their counterparts in the Australian Bureau of Statistics. These meetings are to coordinate developments in both agencies, especially as CER progresses.

Of course, by the time this is published you should all have filled in a 1991 Census of Population and Dwellings form! (Does it matter if it's a bit late? ed.)

Alistair Gray

### Invermay

We have been enjoying weekly visits from Roger Mead during his stay at the University of Otago (see elsewhere in *Newsletter*). He has become familiar with a lot of the work that goes on at Invermay and contributed to a series of educational seminars, as well as stimulating discussion with his enthusiasm for all manner of statistical issues. We have also been visited by Bruce Weir, who gave a seminar on paternity testing, and met with a number of our animal scientists.

Roger Littlejohn

### Massey News

The sudden death of Sirimathie Wewala in January saddened an already rather mediocre Manawatu summer. Siri completed her MSc and PhD in this department, and was to have joined us

as a lecturer the week after she died.

Alison Lister returned to Christchurch after a successful year organising first year students. Richard Rayner has come to us from Christchurch and has made a meritorious start on organising our computers. Bruce Weir visited long enough to introduce us to DNA fingerprinting, a future growth industry for legally minded statisticians.

Wendy Humphries will be our first Diploma of Applied Statistics graduate. Wendy's association with Massey began as a technician with AMD at Palmerston North, and survived a move to Chemistry Division in Lower Hutt.

The torturous process of classifying statistics continues. On January 1 the School of Information Sciences expanded into the School of Mathematical and Information Sciences to encompass the statisticians and mathematicians. By this time next year the process might finally have converged.

Greg Arnold

### Waikato and Ruakura

R. Dennis Cook, University of Minnesota, is visiting Waikato for two months. On March 14 he presented a workshop on dynamic graphical methods in linear models. Graphical methods were demonstrated by using XLISP-STAT, a graphics programming environment developed recently by Luke Tierney. This environment allows easy access to virtually all the modern graphical methods - high dimensional rotation, animation, brushing, linking, identification, touring, slicing and so on.

The Macintosh IIsi that Dennis has been using during his visit has been generously provided by Apple Computer (CED Distributors).

The Unit for Quality and Productivity Improvement organised a one day seminar on Performance Appraisals: New Directions. The presenter was Peter Scholtes of Joiner Associates, an expert in organisational development. The event was very successful with over 150 managers attending. Overheard after the seminar: 'I'll say one thing for him. He was the clearest statistician I've ever listened to!'

John Eccleston, Bond University, is visiting in June. Murray Jorgensen has returned from leave at the University of Waterloo, where he looked at diagnostics for generalized linear models. Bill Bolstad completed his DPhil. and was seen popping champagne corks somewhere on campus. Barbara Dow had a son in November and has taken a few months leave.

Statisticians in MAF convened for the two days before the Cook workshop in March for MAFStat 91.

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### VUW/ISOR

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Summer's gone and the customary holidays have been taken including the following overseas jaunts: Leigh Roberts spent the winter in Britain pursuing his interests in Financial Mathematics. Tapas Sarkar spent three weeks in India and gave several talks including a seminar at the Indian Statistical Institute. Peter Smith visited GEC in London to work on a statistical analysis of optical communication systems. Peter Thomson visited the AGSM in Sydney to work with Geoff Eagleson. David Vere-Jones gave a talk to the American Association for the Advancement of Science on stochastic modelling of earthquakes. During his trip David visited Bob Oliver, David Brillinger and Yan Kagan.

The ISOR administration is as changeable as ever and the following recent changes have taken place: ISOR is now a Department as well as an Institute. 5 SUNs have just arrived.

The university IBM has been ditched and the summer saw stirring efforts from Steven Haslett and Ross Renner to transfer an enormous number of students and files to the new VAX system. We welcome Rona Bailey from AMG to the staff, Rona is splitting her time between lecturing in OR and her work at AMG. Dr. Zheng Xiaogu has left ISOR to take on a six month contract with the Met. Office. We wish him well in his new position. ISOR are now supporting two full time positions from contract research income.

Lastly the important news: we now have a regular and very sociable volleyball session. Peter Thomson is building a garage/bach in the Marlborough Sounds. Ross Renner claims his red braces are not a political comment. Andrew Bruce is following the hippy trail down the West Coast.

## Auckland

At the time of writing, we are in the final 2 days of enrolment and there has been real growth. We expect a cohort of over 2000 students doing first year Statistics (spread over a number of parallel courses). We have a number of new courses beginning this year. From this year, the targeted 1st year Statistics course for Commerce will be joint between the Mathematics and Statistics Department, and Management Science and Information Systems. We will be teaching 1st year Statistics on the new Tamaki Campus, and also on the Auckland College of Education Campus partly in association with the new B.Ed. degree. We have a new 2nd year course in practical Operations Research jointly with Engineering Science, and Management Science and Information Systems, and a new 3rd year paper on the design of surveys and experiments. We are building strong links with non-mathematical Departments. Recent growth at first year is beginning to feed through. Second year Applied Statistics will top 350, and enrolments in our two 3rd year Applied papers currently stand at 56 and 75.

We are advertising a new lectureship in Applied Statistics or Operations Research (what about a real ad?- ed.)

Lynne Gilmore (ex Alcohol Research Unit, Dept. Community Health) is joining us at Tamaki. Peter Whittle (Cambridge) is the 1991 Forster Lecturer and will be visiting most campuses in March. We have 2 visitors, Robert Gentleman from the University of Waterloo (Canada), and Li Yuang Hu from the Southwest-China Teaching University. Nick Fisher (CSIRO, DMS Sydney) spent the first week of February with us working with Alan Lee. There was a very successful end of year Statistics barbecue at the Lees' at Leigh, enhanced by copious quantities of scallops and crayfish courtesy of Pierre Mullins, diver extraordinaire.

Chris Wild.

## A Chat with Bruce Weir

Peter Danaher and Harold Henderson ask the questions.

PD: Tell us a little about your education and career.

BW: I did Mathematics at Canterbury and at the end of my second year I got a summer internship position at the Applied Maths Division of DSIR with Brian Hayman. He told me about genetics and that really fascinated me. So when I finished at Canterbury, Hayman suggested I write to NC State University at Raleigh, where he had been on sabbatical. I did, got support, then went there for my graduate work. I worked with Clark Cockerham, the leading figure in statistical applications to genetics. I was there for three years and then did a post-doc at UC Davis in the genetics department with Robert Allard, a plant geneticist. In 1970 I came to Massey and taught for six years then went back to Raleigh as a faculty member in 1976.

PD: This has an obvious answer, but are there things you can do at NC State that you couldn't do in NZ?

BW: I have a great deal more freedom and opportunity for my research, which bothered me here. The teaching loads, at least at that time in New Zealand, were very heavy and I thought there was a lot more appreciation of research at NC State and consequently more rewards for performing. The opportunities are there. I have funding from the Federal Government, the National Institutes of Health, which gives me virtually full-time to spend on research and provides adequate resources. So those are the obvious things, but the less obvious ones are that you are more at the centre of things. You know what is going on, you don't have to wait until the journals come out, you know what people are doing and I have the opportunity to work with a great variety of people. The stuff I talked about today [on statistical issues in the forensic use of DNA] is very interesting and exciting. On the other hand I have been impressed by the work I have seen going on now in New Zealand, and of course we still enjoy coming back to visit.

PD: Its obvious your seminar attracted a lot of people's interest - and there were more biologists than statisticians in attendance!

BW: Its certainly true that I probably wouldn't get employed in a statistics department any more and I probably fit more into a genetics department even though I like to think I do statistics.

HH: And write statistics, as in your 1990 book "Genetic Data Analysis"!

PD: It's a bit difficult isn't it: the statisticians don't see you as a statistician and the biologists don't see you as one of them. I find it difficult in my own work. How do you find it?

BW: Actually, I find that the geneticists are a lot more receptive than the statisticians are, so I feel more comfortable talking to geneticists these days and I think they appreciate the kind of things we are doing.

PD: Thanks Bruce for those brief words.



### Molecular Evolution Workshop

Bruce Weir is organising a workshop on Molecular Evolution for the Thursday and Friday prior to IBC 92, December 3-4, 1992. It will be held in Rotorua at the Forest Research Institute. The New Zealand contact is David Penny at Massey.

# STATISTICAL SOCIETY OF AUSTRALIA Statistical Computing & Biological Statistics Sections

## STATCOMP / BIOSTATS 91

Greenmount Resort Hotel, Coolangatta  
1 - 5 July 1991

SECRETARY: DR. R.J. WILSON

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STATCOMP  
CONVENOR: PROF. A.N. PETIUITT

BIOSTATS  
CONVENOR: DR B.R. CULLIS

TREASURER: DR A.J. SWAIN

STATCOMP/BIOSTATS 91 is the biennial meeting of the Statistical Computing and Biological Statistics Sections of the Statistical Society of Australia, being held in conjunction with the Biometric Society (Australasian Region), the International Association for Statistical Computing (I.S.I.) and the C.S.I.R.O. Biometrics Units. The 2nd circular (including registration form) have been sent to Dr H. Henderson in late February for distribution to members of the Statistical Society of New Zealand. Please contact him or the conference secretary if you did not receive one. Abstracts should be submitted by 31 March and the registration form returned by 31 May, to the conference secretary.

The Conference will be held in the week 1-5 July, from Monday morning to Friday lunchtime, at Greenmount Resort Hotel, Coolangatta on the Qld-N.S.W. border. STATCOMP will occupy the first half of the programme and BIOSTATS the second half. The keynote speakers are:

### STATCOMP

**Professor Julian Besag:** Computational aspects of image & spatial analysis.

**Professor Peter Hall:** Computational techniques for the bootstrap.

**Dr Peter Thomson:** Smoothing algorithms for time series.

**Professor Sanford Weisberg:** Dynamic graphical techniques in diagnostics.

### BIOSTATS

**Dr Kaye Basford:** Three-way methods for multi-attribute GxE data.

**Dr Chris Glasbey:** Image analysis in agricultural research.

**Professor Charles McGilchrist:** Mixed models for discrete data.

**Professor Roger Mead:** Measurement scales and self adjustment.

**Dr Richard Morton:** Over-dispersion in generalised linear models.

Papers are invited in ALL areas of Statistical Computing and Biological Statistics. Currently, the contributed sessions include, for STATCOMP, high dimensional smoothing; the jackknife, convergence and the iteration derivative; statistics and neural networks; regression trees and, for BIOSTATS, methods for multi-attribute GxE data; mixed models and over-dispersion in G.L.M.s; dependent data. Papers will be presented by lecture format, with 25 minutes for the lecture and 5 minutes for questions. Computing facilities will be available for the presentation of papers and demonstrations of software. There will also be opportunities to evaluate relevant texts and computer software and hardware through displays and demonstrations.

Abstracts of all papers are required. They should be informative and should occupy one A4 page, with a margin of 3cm. on both sides. The format is a title, followed by the author(s)' name(s) and address(es), followed by the abstract. Abstracts must be received by the Secretary by 31 March.

Delegates may register for the periods below for the respective fees, which also cover lunches (except Friday) and morning and afternoon teas. There is a discount for registering by 31 May and a 50% discount for students. Members fees are applicable for members of above mentioned societies.

Period	Mem./Disc.	Other/Disc.
Mon. a.m. - Fri. lunch	\$250./\$235	\$270./\$255.
Mon. a.m. - Wed. p.m.	\$185./\$175	\$200./\$190.
Wed. a.m. - Fri. lunch	\$150./\$140	\$160./\$150.
One day only	\$70.	\$70.

Accommodation is at Greenmount Hotel (\$85/room/night - single/twin-share), although alternate accommodation is available. A Welcome will be held on Monday evening and the Conference Dinner on Wednesday night (\$40.00, beverage extra).

For additional information, contact the conference secretary (address above).

# Registration form for NZSA 91 Annual Conference of the New Zealand Statistical Association

Please return by July 29 to

Dr P J Smith  
NZSA Conference Secretary, ISOR,  
Victoria University of Wellington,  
PO Box 600, Wellington.

Surname: .....  
Given name:.....

Affiliation: .....  
.....  
Postal address:.....  
.....  
.....

Email address:.....  
Telephone: ..... Fax:.....

Names: How you would like your name and affiliation to appear:  
.....  
.....

Registration Fee \$55  
Conference Dinner \$35 each for ..... people

Hostel accommodation (bed and breakfast) required for each of the  
following nights (please circle required nights):

Tuesday 27      Wednesday 28      Thursday 29

Type of room preferred (cost per day):      Single \$35

Connecting Single \$32      Double \$25  
Who with? ...../no preference

We will attempt to give you the room of your choice.      Yes/No  
Please send a list of alternative accommodation

Deposit on hostel accommodation by July 29      \$30  
Early payment of registration and conference dinner is appreciated.  
Please make cheques payable to NZSA Conference.