



14th Australian Statistical Conference

If you see a Victorian going swimming in winter then you must be in Queensland ... in particular, at the Gold Coast, the venue for the 14th Australian Statistical Conference, organised by the Queensland Branch.

A total of 400 delegates registered for the conference. Of these, 80 were day registrants and 24 registered for the Epidemiology stream on Monday and Tuesday. As well, there were some 70 delegates from the TIES conference attending the joint day on Monday. On Wednesday, another 65 delegates joined us for the morning workshop on Survey Quality.

Delegates came from all over Australia (ACT 53, NSW 79, Qld 79, SA 18, Tas 3, NT 1, Vic 48, WA 22), New Zealand 30, and other overseas countries including China and Hong Kong 13, UK 9 and USA 10.

There was a large number of students, including about 50 who presented papers as candidates for the EJC Pitman Prize. Congratulations to Petra Kuhnert, a member of the Queensland Branch, who is now the second recipient of the award.

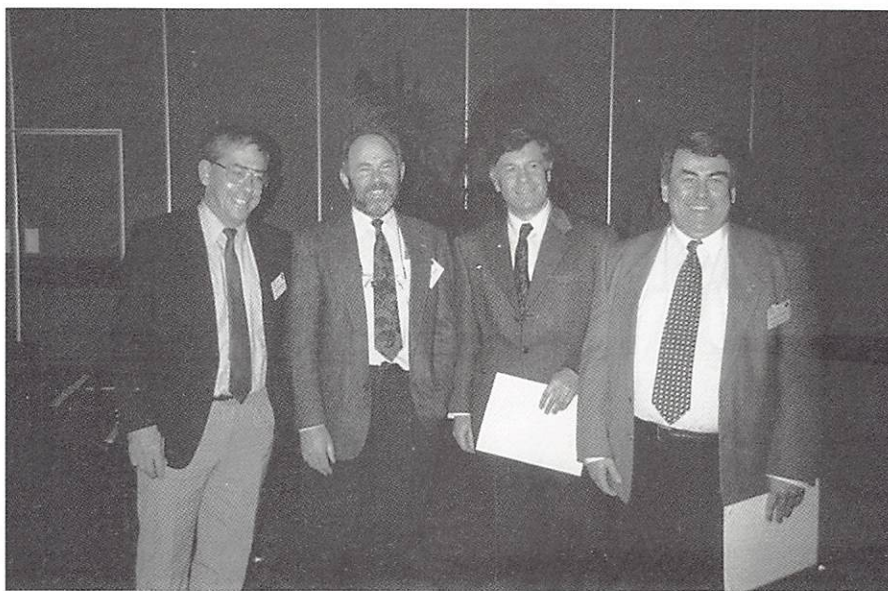
Following Des Nicholls' presidential address, the Society congratulated Eugene Seneta on being awarded the prestigious Pitman Medal. Other of our members who were honoured were Nick Fisher, Ron Sandland and Richard Tweedie, who were made Honorary Life Members.

An estimated 200 enjoyed a welcome reception on Sunday night

of champagne, wine and beer with a tasty array of finger foods.

One hundred and sixty-five delegates and partners were entertained by the "Illusions" show following a three course dinner and refreshments in the theatre. Brendan Farthing (looking very sharp) finally got his watch back in one piece from the magician, after several misadventures.

Delegates were treated to a range of lunch menus including a barbecue in the outdoor seating area beside the conference venue. Delegates were able to enjoy their lunches in the sunshine on several days. The promise of a warm winter conference in the Sunshine State was thus honoured by the organising committee, chaired by the supremely calm Walter Robb.



Des Nicholls with Richard Tweedie, Nick Fisher and Ron Sandland shortly after receiving their awards for Honorary Life Membership

In this issue

14th Australian Statistical Conference	1	EJC Pitman Prize	19
Central Council News	3	Conference Report	20
Marketing the Benefits of Accreditation	6	Letter to the Editors	21
Industrial Statistics	16	Australasian Conferences	22
		Overseas Conferences	23



**PO Box 85,
Ainslie ACT 2601**

Phone/Fax (02) 6249 8266

Email: ssai@interact.net.au

Society Web Page

http://www.mathstat.flinders.edu.au/stats/stat_soc.html

Editors

D. E. Shaw, CSIRO Mathematical and Information Sciences, Locked Bag 17, North Ryde, NSW 2113.
Email: doug.shaw@cmis.csiro.au
Fax: (02) 9235 3200

E. Brinkley, Australian Bureau of Statistics, PO Box 10, Belconnen, ACT 2616
Email: eden.brinkley@abs.gov.au
Fax: (02) 6252 6530

R. I. Forrester, CSIRO Mathematical and Information Sciences, GPO Box 664, Canberra ACT 2601
Email: bob.forrester@cmis.csiro.au
Fax: (02) 6216 7111

Correspondence

Please direct all editorial correspondence to Eden Brinkley.

Disclaimer

The views of contributors to this Newsletter should not be attributed to the Statistical Society of Australia, Inc.

Subscriptions

The Newsletter of the Statistical Society of Australia is supplied free to all members of the society. Any others wishing to subscribe to the Newsletter may do so at an annual cost of A\$10.00 (A\$8.00 if also a subscriber to the ANZJS), for an issue of four numbers.

Advertising

Advertising will be carried in the Newsletter on any matters which the Editors feel are of interest to the members of the Society. For details of advertising rates, etc. contact the Editors at the above addresses.

Printer

National Capital Printing
22 Pirie Street, Fyshwick ACT 2609

**DEADLINE FOR NEXT ISSUE:
16 OCTOBER, 1998**



Lunch on the terrace at Jupiters.

Morning teas included pastries, cheese muffins and afternoon teas were home cooked biscuits. One afternoon the biscuits sported an S+, courtesy of the initiative one of our exhibitors. Exhibitors representing book sellers, software houses and consulting organisations showed their wares. The hard work of Kerrie Mengersen and Sonia Knight ensured a wide range of exhibitions at the meeting, as well as a substantial sum in sponsorship monies, thus containing the costs to be borne by delegates.

Something in the order of 265 papers and posters were given at the meeting, and the scientific

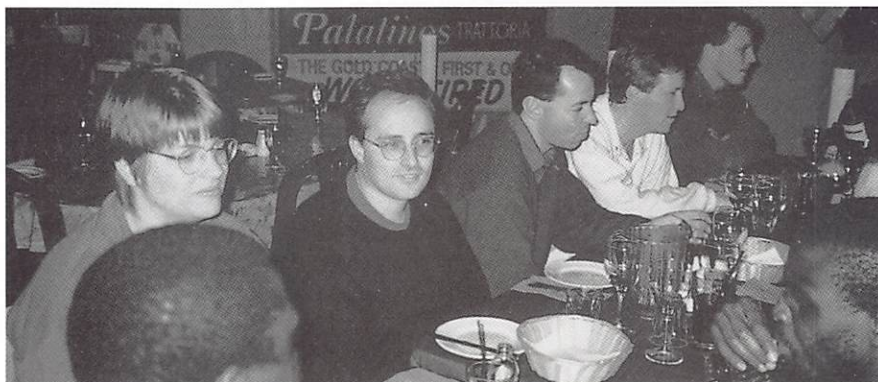
proceedings ran very slickly, thanks to the immense organisation undertaken by the programme chair, Kaye Basford, who was assisted by the proceedings editor and web manager Rodney Wolff and conference treasurer Del Greenway.

It was a big and busy week, and there was a general consensus of the whole affair being a great conference by the many who attended.

ASC15 now seems a long way off (perhaps not long enough for the South Australian Branch!), but we all look forward to getting together again.



Panel for the Statistical Education Section. Kay Basford, Ian Gordon, Virginia Wherway, Pamela Shaw, Richard Tweedie and Ron Sandland.



Young Statisticians enjoying a dinner at "Marios" on the Gold Coast.

Central Council

Notes from the meetings of the Central Council of the Statistical Society of Australia Inc. (SSAI) and the Australian Statistical Publishing Association Inc. (ASPAI) held at Conrad Jupiters in July, 1998.

Accreditation

The Code of Conduct was approved at the Annual General Meeting of the Society as mandatory for accredited statisticians. The President thanked all those who made comments on the various drafts of the Code over the past 18 months. The suggestions were very useful in refining the proposal.

The special resolution to change the name "Chartered Statistician" to "Certified Statistician" was withdrawn because many members were unhappy with the term "certified". A Special Meeting will be held in Canberra in November before the Knibbs Lecture to vote on the new proposal to replace "Chartered Statistician" with "Accredited Statistician" and "CStat" with "AStat" in the Rules. Once this issue is settled certificates will be issued to all those people who have been accredited by the Society.

As mentioned elsewhere in this Newsletter now that the accreditation process is operating smoothly the Society will devote considerable effort to marketing accreditation. Suggestions on how best to do this are welcome.

Central Collection of Subscriptions

All subscriptions for 1999 will be collected centrally and the Branch components forwarded to the Branch Treasurers. This means that all members will have the option of paying their subscription by credit card and Branches will not have to keep track of such things as accreditation fees and joint membership with NZSA. Branches will still set their own subscriptions and early payment incentives. The capitation fee for ordinary members for 1999 has been set at \$50. The capitation fee is the component of the subscription that goes to cover the cost of the journal, the Newsletter and the central administration of the Society.

Administrative Officer

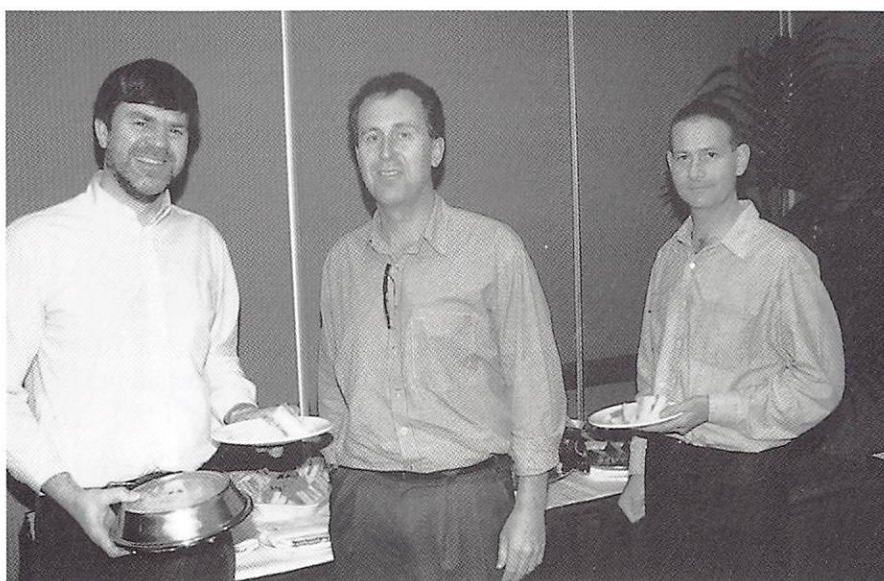
Ms Lesley Sieper has been appointed as the Society's new Administrative Officer. The Business Office also has a new mailing address

Statistical Society of Australia Inc.
PO Box 85
AINSLIE ACT 2602
ssai@interact.net.au

Elections

Professor Ian James was elected as the Society's Vice President for 1998-99 and President-elect. Ian will take over the Presidency at the AGM in July, 1999.

Lynette Lim was elected as Chair of the Statistics in the Medical Sciences Section, David Steel as Chair of the



Michael Adena, Terry O'Neill and Gary Glonek enjoying a break for lunch.



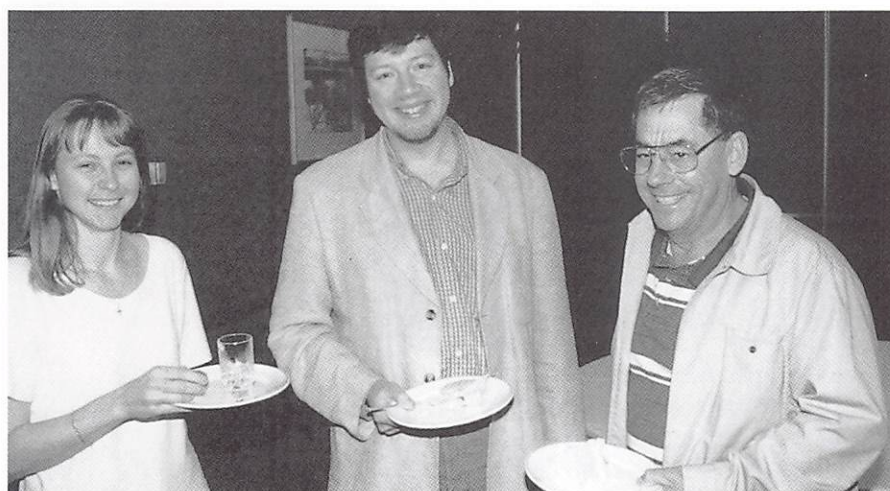
SSAI Executive preparing for the Central Council meeting: Neville Weber, Des Nicholls, Simon Sheather, Eden Brinkley and Helen MacGillivray.

Survey and Management Statistics Section and Brenton Dansie as the Chair of the Statistical Education Section. The Chair of the Biological Sciences Section is currently vacant.

The Society thanks the outgoing Chairs, Kaye Basford, John Carlin, Susan Linacre and Pamela Shaw for organising and directing their Section's activities over the past years.

Neville Weber

Hon. Secretary



Susan Hoffmann, Rodney Wolf and Des Nicholls also enjoying the break for lunch.

Annual Report

April, 1997 to March, 1998

The Society was founded in 1962 as a national "umbrella" organisation to support and further the work of the state statistical societies. The overall objective of the Society is to further the study and application and good practice of statistical theory and methods in all branches of learning and enterprise.

The Society is incorporated in the Australian Capital Territory (ACT). The constitution was revised in accordance with the Associations Incorporation Act 1991 (ACT) on 7 May, 1993.

In order to hold Annual General Meetings of both the Society and the Central Council in association with Australian Statistical Conferences or other mid-year conferences, the financial year for the Society is from 1 April until 31 March. Branches may choose, through their own constitutions, to retain a different financial year.

1. Membership of the Society

Based on the capitation fees in 1997 the Society had 783 ordinary members, 94 student/retired members, and 10 honorary life members, making a total of 887. Equivalent figures since 1991 are 906, 897, 910, 954, 952 and 958. These figures do not take into account those capitation fees in arrears.

2. Central Council

The Annual General Meeting of the Society was held at The University of Sydney on 15 July, 1997. The Annual General Meeting of the Central Council was held on 15 July, 1997 and a general meeting of the Council was held on 17 February, 1998 at The University of Sydney.

The Central Council for 1997 comprised:

President Professor Des Nicholls
(from July 1997)

Vice- Associate Professor
President Helen MacGillivray
(from July 1997)

Editor Professor Simon Sheather

Secretary Dr Neville Weber

Treasurer Mr Eden Brinkley

Branch Delegates:

Canberra
Dr Michael Adena, Dr Terry O'Neill

New South Wales
Professor David Griffiths, Dr Ann Eyland, Mr Woh Choo, Assoc. Prof John Rayner

Victoria
Dr Geoff Laslett, Mr Geoff Bruton, Mr Nick Garnham

Queensland
Dr Gordon Smyth, Mr Rodney Wolff

South Australia
Ms Sandra Pattison, Dr Gary Glonek

West Australia

Dr K. Vijayan, Dr Ian Wright

Scholarships for the Honours Year in Statistics were awarded to:

NSW Nell Carney, Lin Luo, Gabrielle Lyovic, and Catherine Wong

QLD Steven Darlington and Brett Edmunds

SA Kirk Hampel

VIC Karlie Speirs and Kuan Nee Koay

WA Zohair Motiwala

3. Association with other bodies

The Society is an affiliated organisation of the International Statistical Institute, with the President as the Society's *ex-officio* member.

The Society is a constituent member of the Australian Mathematical Sciences Council, and through this Council a member of the Federation of Australian Scientific and Technological Societies (FASTS). Mr Nick Garnham and Associate Professor Helen MacGillivray represented the Society on the Council.

The Society was represented on the National Committee for Mathematics of the Australian Academy of Science by Professor Des Nicholls.

The Society is a corporate member of the New Zealand Statistical Association.

The Society is represented on the Australian Statistical Advisory Council by Dr Ron Sandland, and on Committee QR/4 - Statistical Quality Procedures of the Standards Association of Australia by Dr Geoff Robinson.

The Society is an Associate Member of the Australian Geoscience Council, and its representative is Dr Nick Fisher.

The Society is a member of the Australian Foundation of Science.

Professor Chris Heyde is a member of the Board of Directors and Professor Sue Wilson was the Society's representative this year.

4. Finances

The Society's financial affairs for the year are detailed in the Financial Statement.

The capitation fee for 1997 was \$45, comprising an ASPAI (Australian Statistical Publishing Association Inc) component of \$22 and a general component of \$23. The financial state of the Society is generally healthy.

Central Council warmly thanks Mr David W. Siström for his time and effort in auditing the accounts.

5. Australian and New Zealand Journal of Statistics

The first issue of the new journal published by Blackwell Publishers appeared in March, 1998. The new journal will be cited by the Science Citation Index, thanks to the efforts of Ian James who coordinated the rather long reviewing process necessary for a journal to gain entry into the Science Citation Index.

The Society would like to thank Ian James, Murray Jorgensen, Simon Sheather, and Helen MacGillivray for their efforts in ensuring the smooth merger of the *Australian Journal of Statistics* and the *New Zealand Statistician* and coordinating the transition to an international publisher.

6. Accreditation

Dennis Trewin was appointed as the first Chair of the Accreditation Committee.

The Committee has met regularly throughout the year to consider criteria, prepare the application pack material and more recently to process the applications. By the end of April 80 applications for accreditation had been received. Now that the processes are in place the Society will embark on a

publicity campaign to promote accreditation to employers and others outside the Society. (See later article in this issue.)

7. Conferences, Workshops and Symposia

1997 was the 50th anniversary of the foundation of the Statistical Society of NSW. To celebrate this event the NSW Branch organised a special symposium and dinner which was held at the University of Sydney on 27 September.

The Industrial Statistics Section organised ACIS 97, the Second Australian Conference on Industrial Statistics. The conference was held in Melbourne on 29-30 September, 1997.

The WAYS-97 meeting was organised to follow ACIS 97. WAYS-97 was held at the University of Melbourne on 1-3 October, 1997. Full reports of both meetings can be found in the November, 1997 Newsletter.

8. Awards

At the February meeting of the Central Council Nick Fisher, Ron Sandland and Richard Tweedie were awarded Honorary Life Membership of the Society.

9. Named Lectures

The Belz Lecture was given by Professor Bruce Brown at a meeting of the Victorian Branch on 28 October, 1997. His lecture was entitled 'The importance of being smooth'.

The Knibbs Lecture for 1997 was given by Professor Sue Wilson at a meeting of the Canberra Branch in November. Professor Wilson's lecture was entitled 'Who counts and why? A perspective of the history of women and men in statistics'.

The H.O. Lancaster Lecture was given at the Annual General Meeting of the New South Wales Branch on 18 March 1997 by Dr Oliver Mayo. The title of his lecture was 'DNA technology and merino breeding'.

The E.K. Foreman Lecture was given in Canberra on 8 April, 1997 by Professor James Durbin. The title of his lecture was 'The state space approach to time series analysis and its potential for official statistics'. This lecture is sponsored jointly by the Society and the Australian Bureau of Statistics.

10. Sections

Current Sections and their 1997 chairs are:

Survey and Management Statistics
Ms Sue Linacre

Statistical Computing
Dr Glenn Stone

Statistics in the Medical Sciences
Dr John Carlin

Statistics in the Biological Sciences
Associate Professor Kaye Basford

Statistical Education
Ms Pamela Shaw

Industrial Statistics
Dr Geoff Robinson and Ms Teresa Dickinson

Young Statisticians
Ms Virginia Wheway

Other Sectional and Branch activities have been detailed in the Society's Newsletter.

11. In Memoria

The Society recorded with deep regret the passing of Geoff Watson and Rod Kenyon.

Professor Des Nicholls, President
Dr Neville Weber, Secretary

April, 1998

Marketing the Benefits of Accreditation

REQUEST FOR COMMENT

1. Introduction

The Statistical Society (SSAI) Council Meeting held on 5 July received a report from the SSAI Accreditation Committee which, noting that the Accreditation process was now well established, believed it was now time to give serious consideration to marketing aspects of SSAI Accreditation.

Central Council endorsed a small committee (Des Nicholls – President, and Nick Fisher – Accreditation Committee member) to develop a draft proposal outlining marketing strategies to ensure that all parties concerned benefit from the Accreditation procedure. In order to draw on the considerable knowledge and expertise of the SSAI membership, Council asked the committee to prepare a discussion paper for the August 1998 SSAI Newsletter, inviting comments and suggestions as input to the marketing proposal.

Accordingly, we extend an invitation to all readers to comment constructively on the ideas set out below. We hope to present Central Council with an appropriate set of marketing strategies to benefit both users and contractors of statistical services, and those members accredited to provide such services. In the longer term, we hope that the Accreditation process will lead to an enhanced view of Statistics as a profession, and of those (Accredited professionals) who practise it.

2. Target Groups for Marketing

We have identified three potential target groups with differing requirements of an Accreditation process. The marketing strategy for each group needs to make explicit the benefits to that group. Also, we need to decide how each marketing strategy will be judged to be successful. For example, if employers accept Accreditation as a selection criterion (preferably as an *essential* criterion) then the

Accreditation process will have achieved recognition not only from employers but also from potential employees.

Group 1: Those receiving Accreditation or eligible to receive Accreditation.

Benefits: Recognition of professional expertise; meet requirement by employers or potential employers for confirmation of professional competence.

This group would include:

- statisticians who are members of SSAI
- statisticians who are not members of SSAI
- students and others who are contemplating a career in Statistics

Group 2: Employers or direct contractors of work, that is, organizations requiring statistical work on an ongoing or short-term contractual basis.

Benefits: Assurance of professional competence in statistical aspects of work

This group would include:

- major employers of statisticians: CSIRO, ABS, other Federal and State Government agencies/- departments
large national and international enterprises (e.g. NRMA, BHP, Financial institutions, etc)
private firms (Market Research companies, Management Consultant groups, etc).
- people or groups contracting statistical work:
medical/health area
minerals exploration
industry
environmental
market research
other survey
quality
management
finance
legal

- private firms wanting in-house statistical expertise.

Group 3: Contractors of work (indirect), that is people or organizations involved in tendering for services, part of which requires statistical expertise.

Benefits: Assurance of professional competence in statistical aspects of work

This group would include:

- Government (both Federal and State) departments and agencies outsourcing work, including enquiries, commissioning of Environmental Impact Studies, etc.
- Legal work, where the statistician must work as part of a team and may be required to appear as an expert witness.

3. Marketing Strategies for these Groups

Group 1: Those receiving Accreditation or eligible to receive Accreditation

SSAI Members:

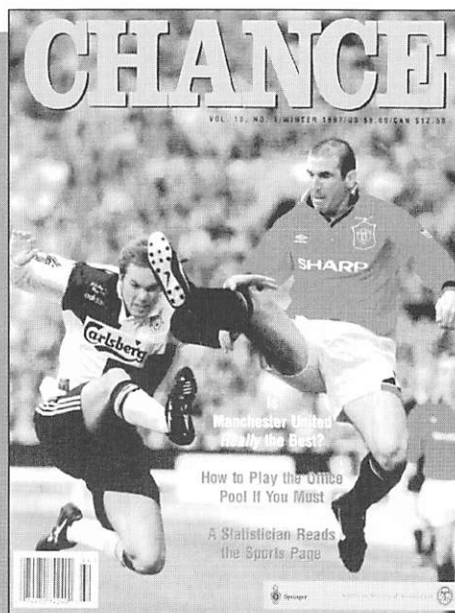
- regular advertising on front page of SSAI Newsletter
- make Accreditation prominent on SSAI Home Page on WWW, with a link to a succinct statement of its benefits.
- publicise (Newsletter, e-mail, WWW) what's being done to promote Accreditation to users of statistical services, *i.e.* Groups 2 and 3 above
- promote Accreditation at all SSAI sponsored conferences and workshops, including those run by Special Interest Groups (SIGs)
- encourage Branches and SIGs to actively promote Accreditation to their members

Non-SSAI

- contact major employers of statisticians, including CSIRO, ABS, University departments (Maths, Stats, Econ Stats,

CHANCE

an Innovative Statistical Magazine



CHANCE

Editor:
George P.H. Styan

A magazine of the
American Statistical Association



Visit the **CHANCE**
Editorial Web Site!
www.math.mcgill.ca/~chance

Entertaining and informative

With its current articles, reports, and columns on humour, book and software reviews, graphics and statistical policy, CHANCE stimulates your thoughts in provocative and innovative uses of statistics and keeps you abreast of new developments. The magazine guides you through the world of statistics using an informal style while retaining a technically correct statistical perspective.

A timely magazine

CHANCE serves as a news magazine for everyone interested in the analysis of data and issues of uncertainty. Besides offering a varied assortment of statistical articles, the journal provides an insider's view of the world of statistics in Washington, DC. Additionally, CHANCE Musings collects fascinating snippets from the press and popular fiction, plus news items of interest to the statistical community.

*A Co-publication of Springer-Verlag and
the American Statistical Association*

Subscription information for 1998:

Volume 11, 4 issues

personal rate:

US \$ 34; DM 81; £ 27; FF 280*

institutional rate:

US \$ 64

ISSN 0933-2480 Title No. 144

Please order from

Springer-Verlag Berlin

Fax: + 49 / 30 / 8 27 87- 448

e-mail: subscriptions@springer.de

or through your bookseller

Plus carriage charges. Price subject to change without notice.
In EU countries the local VAT is effective. Errors and omissions excepted.
* including carriage charges.



Springer

Biometry, medical schools, ...), Federal and State Government department/agencies, private consultants, large enterprises (NRMA, BHP, ...), etc. It would be preferable to make personal contact where possible; at the very least they should be provided with high-quality promotional material. In any case they should be sufficiently persuaded of the value of Accreditation to encourage statisticians employed by them to apply for Accreditation.

- request SSAI Branches and SIGs to prepare lists of private statistical consultants whom they think would be qualified, and make appropriate contact.

Students

- contact appropriate University departments, offering promotional material
- supply information to organisations preparing Careers Booklets for high school and tertiary students

Group 2: Employers and Contractors of work (direct).

- personal contact where possible (and preferably by someone known personally to the employer or contractor)
- send appropriate promotional material
- advertise in appropriate professional/trade journals.

Group 3: Contractors of work (indirect)

- contact by SSAI member(s) where possible
- send appropriate promotional materials.

Those wishing to offer suggestions may do so by contacting
Professor Des Nicholls
Department of Statistics and Econometrics
Australian National University
ACT 0200
e-mail: Des.Nicholls@anu.edu.au

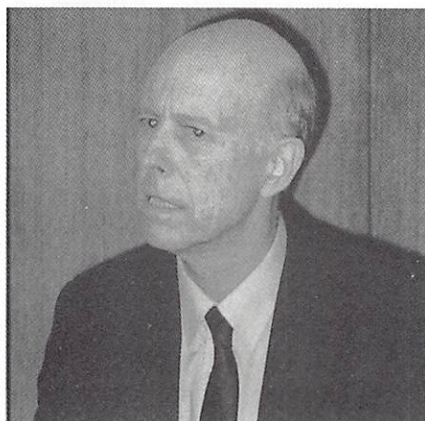
or

Dr Nick Fisher
CSIRO Mathematical and Information Sciences
Locked Bag 17
North Ryde NSW 1670
e-mail: Nick.Fisher@cmis.csiro.au

NEW SOUTH WALES

Some Challenges of Modelling and Inference

On 19 May Professor Chris Heyde, from ANU and Colombia University, spoke on "Some Challenges of Modelling and Inference" at the Sydney University Staff Club.



Chris Heyde answering questions at the May meeting of the NSW Branch.

Levene-Based Homogeneity of Variance Tests

Ky Mathews, of the Department of Land and Water Conservation, addressed the June 17 meeting held at the Royal Hospital for Women, Randwick. Her topic was "Levene-Based Homogeneity of Variance Tests".

Anyone who only visits Sydney for the NSW Branch meetings would have rather a poor impression of our climate – it has rained for every meeting this year! Hopefully the second half will be better.

VICTORIA

How smooth is your (sea) bottom?

At the March Meeting Mervyn Thomas (CSIRO) asked the question "How smooth is your bottom?" and didn't answer it – which was probably just as well. However, he

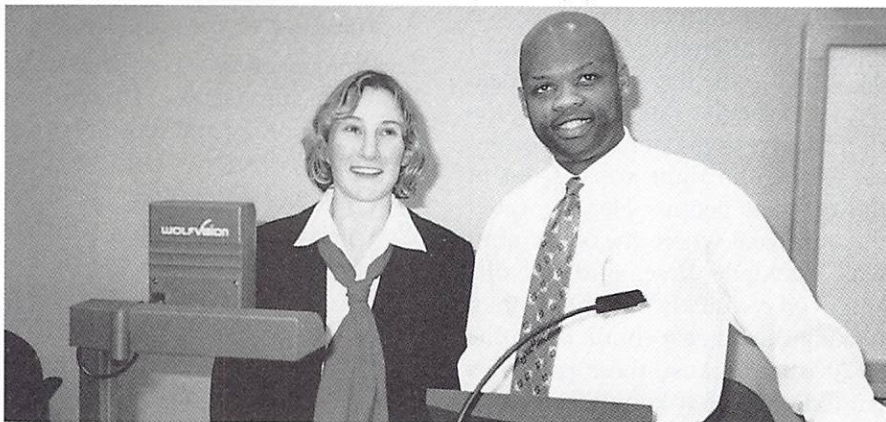
did advise us as to how we might go about discovering whether a (sea) bottom was smooth.

The problem stemmed from work in marine research – and resulted in an application of the method of penalised discriminant analysis proposed by Hastie. The single most difficult aspect of marine biology research of the sea floor is that in many cases, we can't see what's there. At least not without a good deal of effort.

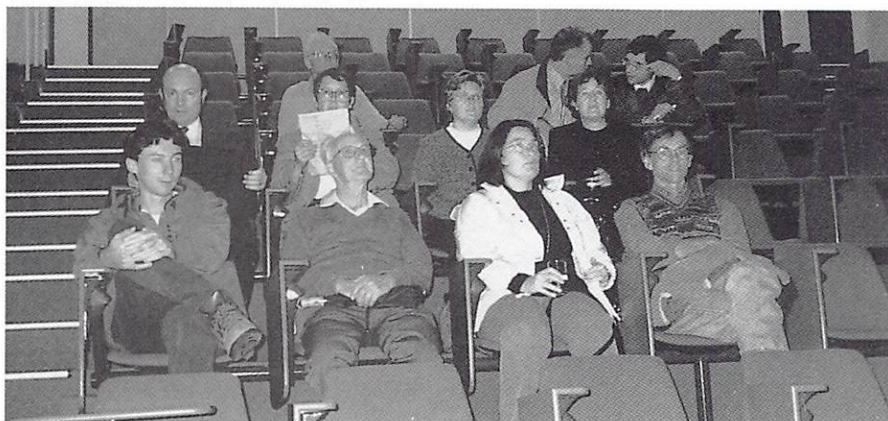
Divers are expensive and diving involves risks. So there is interest in finding cheaper and more efficient methods: one such method is acoustic detection (sonar). This readily produces heaps of data, but can we use the sonar data to reliably say something about the sea bottom?

The basic data were summarised into an average "ping form": the average of a large number of one pulse acoustic responses plotted as a time series. These responses lasted about 120 milliseconds, peaking at about 20 milliseconds and then gradually fading. The exact shape of the ping form varied depending on the characteristics of the sea floor environment. The forms for each of three sea floor types were shown. Given that we want to distinguish sea floor type using the ping form shape, a discriminant analysis was used. This resulted in an apparently excellent discrimination: an error rate of 3%.

The ping form is a time series: X_0, X_1, \dots, X_n (where X_t is the acoustic response at time t ms after the start of the response). The canonical variables take the form $V_1 = a$ at X_t and $V_2 = a bt X_t$. Plotting (V_1, V_2) seemed to give excellent separation of the sea floor types. But it was all an illusion apparently. The coefficients a_i (and b_i) showed no sign of smoothness or sensible behaviour. And the standard errors of the a_i , estimated using jackknife, were found to be an order of magnitude larger than the a_i . Cross-validation, performed with the



Ky Mathews and Abie Ekangaki preparing for the NSW Branch's June talk.



Some of the folk who braved the rain to attend the June meeting.

Susan Hoffmann

Branch Reports

jackknife, indicated a less impressive confusion matrix with an error rate of 17%.

So what's the problem? Most of the problem appears to stem from the highly correlated data structure. One of the consequences of this is that the discriminant functions tend to be dominated by "rough components", as the smooth components correspond to small eigenvalues in W^{-1} , where W denotes the within sum of products matrix.

The answer is, following a method proposed by Hastie, to penalise roughness: instead of W use $W^* = (1 - a)W + aP$ where P is a matrix chosen to encourage a smooth result; and a is a penalty parameter ($0 < a < 1$). It is seen that if a approaches 0 there is little penalty, while if a approaches 1 the result tends to be smooth. (There are analogies here with ridge methods, where I is used instead of P .) There remains a problem of how a should be chosen – and no conclusive answer was given. The possibility of choosing a to minimise cross-validation error was discarded as the error rate was found not to vary regularly with a .

Choosing $a = 0.5$ resulted in a marked improvement in V_1 : the coefficients were much less rough, with smaller standard errors and the early coefficients, i.e., at for small t , were found to be important – as the accepted physics of the situation suggested they should be. With $a = 0.9$, these effects seemed to be even more obvious. But the discrimination error rate was greater than with $a = 0.5$. Similar effects were found with V_2 , except that none of the coefficients was found to be important, suggesting that the second canonical variable itself is not that important. So forcing smoothness had a good effect on the analysis. Bruce Brown would be pleased?

In conclusion, it was suggested that there may be a large class of applications of this type of analysis

– to things like spectral data for chemical fingerprinting, for example.

Statistical Process Control with Statman

The April meeting was addressed by Alan Long, a consultant to industry, who discussed his experiences with statistical process control. Alan discussed a rather complex process map for tackling statistical process control and described how he quickly learnt that much better results were achieved with a much simpler approach. Planning, improvement and control of industrial processes were aided by a cartoon character named Statman. Shop floor workers related much better to Statman and took ideas on board much more readily.

Alan discussed general aspects of business decision making and the mechanisms for making everyday decisions around the questions: Is it Bad? Is it different? What should I do – deal with the system or deal with a particular cause? Getting the right answer was not as important as getting the right answer out of the relevant people! He advocated the approach where the 'easy' stuff was tackled first and results achieved quickly rather than picking the biggest chunk [as in the 80:20 rule] because these problems tended to be well-known and often used as an excuse. These approaches were especially relevant for shop floor people and management teams.

In conclusion, Alan discussed various SPC schemes used in the car industry and expressed concern about the disadvantages of the mechanistic approaches used as part of ISO9000.

Victorian Integrated Travel, Activities and Land Use (VITAL) Project

At the May meeting, which was a combined meeting with the Operations Research Society, Dr Tony Richardson of the Urban

Transport Institute gave a very interesting talk on the Victorian Integrated Travel, Activities and Land Use (VITAL) Project, which is conducted by the Transport Research Centre of RMIT with particular focus on the Victorian Activity and Travel Survey (VATS). The Travel survey is a household based survey which provides a detailed description of daily travel and activity patterns of household members in Victoria. The VATS survey records all travel by all modes by all responding households in the survey sample; and over the last five years has obtained a total response of about 25,000 households. Professor Richardson described the extensive steps made to increase response rates and the ways used to adjust for non response. He also outlined how the VATS survey results had been used in various applications and models.

Jumping to Co-Incidences

The June meeting was addressed by Professor Jim Hanley, Department of Epidemiology and Biostatistics at McGill University, with a very entertaining talk entitled "Jumping to Co-Incidences: Defying Odds in the Realm of the Preposterous". Jim looked at a number of examples, such as, the Lotteries from two neighbouring states having the same winning numbers on the same night, someone winning a jackpot twice within four years, a school having six sets of twins, and three sisters who gave birth on the same day within a short time of each other. Each example was examined as to whether the astronomical odds that were quoted in the newspaper report for the event in question were justified. In all cases the quoted chance was a severe overestimate and it was illuminating to see where the errors had been made. A conclusion from these examples was that newspapers often focus only on those events that have happened, omitting the remainder of the sample space. A lively discussion followed the talk.

People on the move

- Bob Griffiths is leaving Monash University to take up a position in the Department of Statistics, Oxford University. He was previously involved with the SSA including being chair of the last Melbourne conference.
- Rob Hyndman is moving to the Department of Econometrics and Business Statistics from 1 July 1997. However, until the end of the year Rob will be on OSP in Colorado.

Geoff Bruton

QUEENSLAND

Statistical Education in Thailand

On 9 June 1998 the Queensland Branch of the Society was addressed by Dr Suda Tragantalerngsak (Silpakorn University, Thailand) on "Statistical Education in Thailand". Together with Ms Phuengporn Niumsup (Maejo University) and Ms Bang-on Khumphon (Mahasarakham University), Dr Tragantalerngsak has been visiting The University of Queensland and the Queensland University of Technology for 3 weeks as part of a Thailand-Australia Science and Engineering Assistance Project (<http://www.taseap.com/>).

Suda finished her PhD in operations research from the UQ Department of Mathematics about six years ago. She is now head of the Department of Mathematics at her own university, and this was her first visit back.

Suda discussed the general education system in Thailand, the school and university sectors in particular, and problems facing university statistics teachers. Thai students have six years of primary school system followed by six years of secondary school. Entrance to university is based on nation-wide exams. The secondary school curriculum includes basic plots and

data summaries, some probability and simple linear regression (much as it does in Queensland).

At university, statistics is a compulsory subject for students studying degrees in business, economics and so on. Classes may have up to 500 students. Since the lecturer may not have tutors to assist with marking and student queries, assessment is usually based on a mid-term and a final examination only. Teaching is mostly of traditional style, with lectures and exercises, but use is increasingly made of statistical packages, especially Minitab and SPSS.

Of the 22 public Thai universities, 15 offer B.Sc. degrees in Statistics. These produce about 400 statistics graduates a year. Masters degrees in statistics are offered by 8 universities, and one national institute (NIDA) offers PhDs in statistics. Although there are a limited number of government jobs for statisticians, many of the students continue onto business or economics studies after completing statistics degrees.

Problems facing teachers include the fact that statistics is often an unpopular subject with students, the lack of private industry jobs for graduates, the lack of equipment for modern teaching styles, and limited budgets.

An active discussion ensued about high school statistics teaching and making statistics an interesting subject. After the talk a small party retired to a local Thai restaurant, naturally.

Gordon Smyth

Recent Developments in Estimating Animal Abundance

On 18 May 1998 the Queensland Branch of the Society was addressed by Professor George Seber (University of Auckland) on "Recent Developments in Estimating Animal Abundance". This was one of three talks he gave in Brisbane during his short return visit after a 12 year break.

George has just completed an extensive review, with Carl Schwartz, on the topic, following previous reviews in 1986 and 1992. This most recent effort covered approximately 500 publications, so his approach during the talk was to give a broad view of the areas where most development is taking place, with emphasis on a few topics in which he has a special interest. Within each area he covered the elements of the methods and where possible indicated problems and species to which they have been applied.

Subjects were loosely grouped under statistical tools and statistical ideas. Within tools he emphasised sampling schemes and modelling. A particular topic here was adaptive sampling, which is relevant to highly clustered populations. The basic idea is that when a cluster is detected the neighbourhood of that sample is explored completely until all neighbouring units are empty. A recent book by Thompson and Seber (1996) on adaptive sampling indicates the extent to which this area has developed. Two stage sampling, with primary and secondary units, has also seen many recent contributions. Modelling tools which have attracted a lot of interest include generalised linear models, profile likelihood, estimating equations, model selection, bootstrapping, Bayesian methods and model averaging.

Statistical ideas were grouped as those appropriate for closed populations or for open populations, with most of the emphasis on open populations. Topics covered included distance sampling (illustrated by the distribution of the distance of kangaroos from a line transect), change in ratio methods and mark-recapture. Mark-recapture methods have been enhanced by improved and less intrusive tagging methods such as photography and genetic tags, as well as application of a whole range of statistical techniques. In discussing them

Branch Reports

George considered multiple recaptures in particular and indicated how various types of statistical methods not usually associated with the area were being applied.

Unfortunately discussion at the meeting was cut short by a competing demand for the lecture room, but continued on at dinner afterwards. In a technological first for the Branch, the talk was videotaped, allowing total recapture of the ideas for those present and review by those who weren't.

Coming away from the meeting it was hard not to feel overwhelmed by the breadth of ideas and methods which are being applied in what is usually thought of as a fairly specialised area, and to wonder if the number of publications is fast overtaking the numbers of individuals in some of the populations which the methods are being developed to assess! The broad nature of the talk certainly helped place them in perspective.

Tony Swain

The SSA Qld Video Collection

... well, at the moment the collection is just one video, namely a recording of Professor Seber's talk at the May meeting of the Queensland Branch. The quality of vision and sound is quite good, and most of the overhead transparencies can be read fairly easily. Any folk who are interested in seeing the video, along with a hard copy of Professor Seber's overhead transparencies, need only send a blank VHS video with return postage to the Branch secretary, who will arrange a copy.

Rodney Wolff

SOUTH AUSTRALIA

SA Honours Scholarship 1998

The 1998 Statistical Society of Australia Honours Scholarship was

awarded to Susannah Lock of the University of Adelaide.

South Australian Branch Council 1998

The South Australian Branch Council for 1996 is:

President	Sandra Pattison (NCVER Statistics Division)
Vice-president	Dr Ian Saunders (CSIRO Mathematical and Information Sciences)
Secretary	Dr Gary Glonek (Flinders University)
Treasurer	Dr Bronwyn Harch (CSIRO Mathematical and Information Sciences)
Council	Dr Glenys Bishop (University of Adelaide) Lynne Giles (Flinders University) Prof Richard Jarrett (University of Adelaide) Dr Ari Verbyla (University of Adelaide)

ASC15

The SA branch is gearing up to host the 15th Australian Statistical Conference to be held 3-7 July 2000 at the Adelaide Hilton International. The Conference Convenor is Richard Jarrett of the University of Adelaide. If you have any suggestions for the conference, we'd be most interested to hear from you. Contact: Richard Jarrett (rjarrett@stats.adelaide.edu.au)

How smooth is your bottom?

After the Annual General Meeting on Tuesday 17 March, Dr Mervyn Thomas of CSIRO Mathematical & Information Sciences, entitled "How smooth is your bottom? - experience with penalised discriminant techniques in acoustic sampling".

In the past there has been scant knowledge of what the seabed looks like, where fish and other marine life congregate and why. Today modern technology is

showing scientists a very different picture of ecosystems. It is information that will be of great benefit not only to fisheries management, but to the multiple-use management of Australia's ocean territory in its entirety.

The explosion in computer power over the last decade has resulted in computers on research vessels becoming the researchers' eyes and ears. The computers are programmed to interpret acoustic 'pings' that are bounced off the seabed and return as high frequency echoes.

The statistical techniques associated with this work was discussed.

Biographical: Mervyn (based in Brisbane) is a Science and Industry Manager (SIM) for the CSIRO Division of Mathematical & Information Sciences. He looks after the division's interests in the environmental and biological sectors of CSIRO. Mervyn first joined CSIRO in 1991 as a Manager of a Biometrics Unit. Other research interests also include applied Bayesian statistics.

Web Resources for Statisticians

At the April meeting Glenys Bishop of The University of Adelaide and Lynne Giles of The Flinders University of South Australia spoke about Web Resources for Statisticians

The amount of information available on the World Wide Web is ever increasing. However, finding the information you require can be a frustrating and tedious procedure.

The presentation was given in two parts. Lynne presented the first half, in which she showed some helpful web-sites for statisticians with a particular focus on general and educational resources.

In the second half, Glenys described the development of the explorapedia, SMART (Statistical and Mathematical Advanced Research Techniques). This is a training facility available on the

Web. The aim of SMART has been to develop a framework within which an overview of modern advanced quantitative methods can be produced and delivered in a manner that is timely and cost effective. Glenys also demonstrated some training modules about experimental design that she is authoring for inclusion in SMART.

Biographical: After completing Honours at Flinders University in 1989, Lynne worked as Statistical Consultant at the Waite Institute for 4.5 years. She then returned to Flinders University, initially as Research Statistician in the Centre for Aging Studies, before taking up her current position as Statistical Consultant in the university in 1996. She is concurrently completing a Master of Public Health, with her thesis addressing longitudinal changes in physical function in an elderly population. Glenys also began her career as a Statistical Consultant at the Waite Institute for 4.5 years. She developed an interest in using computers for teaching at Queen Mary College, London and later in the Economics Department at the University of Adelaide. She later returned to the Waite Institute to undertake a PhD in Biometry. After its completion she became one of the foundation staff at Bond University and took up her current position as a Lecturer in the Department of Statistics at the University of Adelaide in 1993.

Recent Developments in Estimating Animal Abundance

Professor George Seber of Auckland University gave a talk to the Branch on recent developments in estimating animal abundance when he was visiting in May.

George Seber and Carl Schwarz have just completed an extensive review of the above topic. This follows his 1982 book and two previous reviews published in 1986 and 1992.

The subject continues to expand at a considerable rate not only in new

developments but also in the number of applications. Professor Seber gave a broad brush picture of these developments with particular emphasis on capture-recapture and some of the statistical tools that are in vogue.

Biographical: George Seber took his Bachelor's and Master's degrees at Auckland University and then continued his graduate studies under a Commonwealth Scholarship at Manchester University, England in 1960. After completing a PhD in Statistics there he spent two years as an Assistant Lecturer in Statistics at the London School of Economics before joining the Auckland Mathematics Department in 1965. In 1971 he was invited to a personal Chair in Biometrics at Otago University but later returned to Auckland in 1973 to take up the first Chair in Statistics and the Headship of a newly created Statistics Unit within the Mathematics Department. He was involved with establishing a new Department of Statistics in 1994.

He enjoys teaching at all levels and writing books. Currently he is author or co-author of eight books (including one in press and one almost completed) entitled "The Linear Hypothesis" (2nd edition, 1970), "Elementary Statistics" (1974), "Linear Regression Analysis" (1977), "Estimation of Animal Abundance" (2nd edition, 1982), "Multivariate Analysis" (1984), "Nonlinear Regression Analysis" (1989, with Chris Wild), "Adaptive Sampling" (1996, with Steve Thompson) and "Statistics: Insight Through Data" (with Chris Wild, in preparation). A further book has been started provisionally entitled "A matrix handbook for Statisticians". His current research interests (1995) are in adaptive sampling, methods of estimating animal abundance, and capture-recapture models applied to epidemiology.

Markov chain Monte Carlo methods with applications

Dr Ari Verbyla, of BiometricsSA, addressed the June Branch meeting on Markov chain Monte Carlo methods with applications. This talk explored Markov chain Monte Carlo (MCMC) methods. MCMC was explained, and examples presented to illustrate the strengths, weaknesses and difficulties of the approach. The talk touched on splines, variance heterogeneity, t-distributed errors, generalized linear mixed models and software, including ASREML and BUGS (with some help from S-PLUS).

His venture into Bayesian methods and in particular MCMC was motivated in two ways. Firstly, with Peter Taylor of the Department of Applied Mathematics, he supervised a University of Adelaide Statistics/Applied Mathematics honours project by Andrew Parrott on this topic. Secondly, the need to analyse specific problems using complex models forced him to examine the MCMC approach.

Biographical: Ari Verbyla is Senior lecturer, Department of Statistics, University of Adelaide. Seconded in July, 1997 to become founding Director of BiometricsSA, a co-operative teaching, research and consulting group of SARDI and the University of Adelaide. He held lecturerships at SAIT (now University of SA) and University of Melbourne and obtained a Ph.D. in Statistics from the University of Adelaide and a Master of Science degree from the University of Melbourne.

Gary Glonek

WESTERN AUSTRALIA

The genetic epidemiology of common complex disease: new methods based on Gibbs sampling

Dr Paul Burton, Leicester born, Leicester bred. Currently Head of

Branch Reports

the Division of Biostatistics and Genetic Epidemiology with the TVW Telethon Institute for Child Health Research (TVWTICHR), a moniker weightier than his waistline but less prodigious than his personality. A man versed in the arcane arts of Gibbs sampling. A man to be revered.

In presenting the first talk of the year (in April no less), following the branch's AGM, Paul apologised in advance for any subsequent incoherence. The Gibbs sampling guru claimed to have had the worst day of his statistical consulting career, having spent several hours explaining to his clients that despite evidence to the contrary, there is no such thing as a free lunch (after which he bought them all dinner). It is to Paul's credit that he managed to calm himself down, compose his thoughts and present one of the most interesting talks I ever have had the pleasure of sleeping through. Congratulations Paul.

Paul described how generalised linear mixed models provide a unifying approach to the analysis of a wide range of phenotypes and how Markov Chain Monte Carlo methods, implemented using the BUGS software, provide a framework in which such models may readily be fit. He then discussed some of the theoretical and practical issues surrounding the use of Gibbs sampling in genetic epidemiology.

Adjustments for regression dilution in multiple linear, logistic and Cox proportional hazards regression

I was walking through the park one day

In the very merry month of May
I was taken by surprise

By a girl with sparkling eyes
Who asked me about adjustments
for regression dilution in multiple
linear, logistic and Cox proportional
hazards regression.

I am NOT kidding. She did. I told her to attend the May meeting of the WA branch but she wasn't there.

It was her loss, and mine. I never got her phone number and I never got to the meeting.

Associate Professor Matt Knuiman, an accomplished and polished speaker, presented the May talk. The talk was well written, well delivered and well there's not much else I can say as I wasn't there. Matt did comment that it was nice to give a lecture in a theatre so often frequented by himself as a student all those many years ago, and to still see the same old faces and the same old lecturers. Whether this is a reflection on the desire of all concerned to continue living and working in the country's best city or an indication of the in-bred nature of the branch is a matter for debate.

Matt discussed a simple approach to adjusting for regression dilution involving the calculation of an estimate (called the naïve estimate) of the regression coefficient. The naïve estimate is obtained by assuming that the measured value of the covariate is the true value and by then adjusting the estimated coefficient for measurement error, where the factors for adjusting the naïve estimate of the coefficient must be obtained from a reliability study. One interesting aspect is the potential effect of measurement error in some covariates on the estimates of linear coefficients for other covariates that were measured *without* error.

Confessions of a statistical expert with infinite variance

June. Wet, wild, windy and unseasonably warm. A time to shelter indoors and hear the confessions of a statistical expert, with infinite variance.

Hailing from sunny Villanova University (the town, not the racing car driver) near Philadelphia, Associate Professor Mike Levitan was welcomed as the June speaker. Dressed in a blue and white striped shirt with matching red tie, Mike regaled the audience with his testimony on the hazards of appearing as an expert witness

before the U.S. Federal Court (the infinite variance derives from the fact that Mike has performed such services only once). Appearing as a witness for several groups of radio stations Mike was tasked with modelling the mean performance time of feature music. A range of mean times with confidence intervals was produced detailing the very apparent differences between the groups. Mike's efforts were, unfortunately, frustrated by the opposing counsel who assumed that as the range of the data for all of the groups of stations was the same then the groups themselves were the same. Shame, opposing counsel, shame.

Further to this Mike explored the issues facing expert witnesses. As Marcia Angell, Executive Editor of the *New England Journal of Medicine* stated – "Science is not for hire, but some scientists are." Oblivious to alliteration, the ponderous problem of professional prostitution was presented and the promotion of purely "junk" (pseudo, perhaps) science explored. Mike described an alternative model to that currently used in the legal system.

An interesting talk which generated much discussion afterwards at a local Vietnamese restaurant.

Jason Boland

CANBERRA

Modeling Stock Price Uncertainty

Professor Douglas Steigerwald of the University of California, Santa Barbara, spoke to the Branch in April on modeling stock price uncertainty. He showed a graph of IBM stock price changes over 1995 which clearly showed that large changes tended to be followed by other large changes, indicating a need for some kind of model.

Doug explained a basic economic model for the New York Stock Exchange, which hopefully is relevant to other exchanges. There

are three main players – the specialists who deal in a particular company's stock, the liquidity traders (most like you and me) who buy and sell stock when they either have spare money or need money without much regard to any over- or under-pricing of the stock, and private information traders (most like insider traders) who trade because they know a stock is either under- or over-priced.

Two quantities impact upon stock price variation – the number of trades of the stock in a day, and the past price variation. Both display serial correlation, the correlation persisting longer in the number of trades than in the variation. A mixture model is used to link the two. Doug showed that the model seems to perform quite well, but one small problem remains – almost all days are predicted to be high variation days.

By special request, the Tu Do Vietnamese restaurant in O'Connor hosted the Society to dinner after the talk for the second time this year.

Promoting a culture of Data Sharing

At the May meeting, Professor Denise Lievesley talked about promoting a culture of data sharing, drawing on her experience as director of the UK Data Archive at the University of Essex.

Denise believes that those who publish research then should make the data available to others to refute, clarify, confirm, etc. Providing data is a requirement when submitting papers to some

non-statistical journals. The Royal Statistical Society is currently debating whether to enforce this action for authors of papers to be published in their journals.

The advantages in having specialist facilities to preserve and to provide access to data and corresponding documentation are numerous. For instance, data users benefit from such a facility by making use of real data to add relevance and interest to their teaching courses.

Denise also explored the benefits to data producers. These included revenue, altruism, reducing respondent burden by encouraging secondary data analysis rather than fresh data collection, and enabling links to be forged with data users. In addition, the archive addresses queries from users and only pass on appropriate questions to the data providers.

Some concerns of data providers include deliberate or accidental misuse of data, errors being found by users, and their own competitive position being undermined. In the UK Data Archive, some of these concerns are abated through establishment of a legal contract between every data user for every data set.

The audience had further opportunity to hear Denise's views on data sharing at the after-meeting dinner, which was held at the Little Saigon.

Melissa Dobbie

The National Bird Atlas Project

On a wet and wild June night, Society members gathered to hear

Dr Geoff Barrett of Birds Australia speak on the national bird atlas project. Fifteen years ago, an atlas displaying the distribution of 850 bird species across Australia was produced. This atlas is now being updated, employing the services of 3000 to 10000 volunteer birdwatchers. As an aside, Geoff agreed that data quality is an issue, with so many enthusiastic and competitive individuals involved.

Volunteers can submit a point list, consisting of a list of all birds spotted in a certain time within a 1 km² area around a specified point; or a grid block list, consisting of a list of all birds spotted in a certain time in a block ranging from 1.5 km² to 15 km². They can also submit notification of rare or unusual species spotted anywhere, anytime.

A new part of the atlas project involves modelling the relationship between habitat and bird distribution. Data for this study comes from volunteers filling in a detailed form describing the nature of habitat in a 2 ha area, and aiming to count birds in this area once a season, for a year.

Geoff concluded his talk with a slide show of birds, some of which have flourished in the last 15 years e.g. galahs, some of which have declined in numbers e.g. lorikeets. He also showed examples of different habitats that will be included in the study of habitat and bird distribution.

Lively bird-oriented conversation continued over dinner at the Little Saigon.

Alice Richardson

Making Statistics count

On Thursday 9th July at ASC14, there was a panel discussion entitled "Making statistics count".

The first speaker was Ron Sandland, the Chief of CSIRO Mathematical and Information Sciences who is currently seconded to the National Australia Bank.

The next speaker was Bob Esler, a consultant who has done a lot of work with the telecommunications industry.

Third was Richard Jarrett, from the University of Adelaide.

Last was Ian Saunders of CSIRO Mathematical and Information Sciences, who had organized the session.

My summary of the main points made in the session is as follows.

INDIVIDUAL STATISTICIANS need to

- * understand the application subject areas in which they work, particularly the language of those areas,
- * keep their work simple,
- * press for a long-term view to be taken, and
- * state value propositions indicating clearly the value and benefits of the contributions that they can make.

INDUSTRY'S NEEDS include

- * widespread basic understanding of variation,

- * sophisticated techniques in some (appropriate) circumstances, and

- * statisticians to communicate well.

TRAINING OF STATISTICIANS should produce a range of types of statistics graduates. It needs to include

- * skills in problem formulation,
- * communication and people skills,
- * familiarity with managers' needs for data,
- * the ability to work with people in other specialities.

As members of THE STATISTICAL SOCIETY, we should

- * better formulate our value proposition, indicating the value and benefits of the contributions that we can make,
- * consider professional development courses, and
- * contribute to continuous revision of the ways by which industrial statisticians try to make statistics count. One way is to Email your comments to Ian.Saunders@cmis.CSIRO.au

If we were to only achieve one change, then the meeting suggested that it should be to encourage mentoring of young statisticians by more experienced statisticians.

Some guidelines for this (based partly on private discussions after the session) are as follows.

(1) Young statisticians should respect the mentor's time. If substantial advice is being sought then the mentor's time might need to be paid for. Sometimes the potential mentor might suggest that someone else would be more appropriate.

(2) Mentors should respect the confidentiality of the young statistician and the situations which might be discussed.

(3) The main purpose is not to provide technical ideas but to provide advice about value judgements and career directions.

- * How can I get more respect for the work which I do?

- * I'm only junior, but how can I convince my bosses that my ideas deserve great weight in this instance?

- * Should I spend more effort on X or less effort on Y than I currently do?

- * I'm thinking of changing jobs.--- What do you think?

(4) If you would like to find a mentor (or merely to get a few words of advice) try contacting someone who has given a talk which you enjoyed, who lives near to you, or whose work you respect. It feels an honour to be asked for advice and other members of the Statistical Society will generally be sympathetic to your difficulties, so the person whom you choose is likely to be helpful to you.

Geoff Robinson

Accreditation

Accredited Members

The following applications have been approved by the Central Council.

GStat: Paul Brown
Melissa Dobbie
Luke McMahon
Helena Oakey
Nell Stetner-Houweling
M. Zissimos

CStat: Caro-Anne Badcock
Mary Barnes
Helen Bartley
Mark Berman
John Best
Michael Buckley
John Carlin
Lynda Chambers
Alan Coates
Martin Collins
Ray Correll
Teresa Dickinson
Patrick Fitzgerald
Ian Gordon
David Grayson

Joan Hendrikz
John Henstridge
Matthew Knuiman
John Ludbrook
James Marinopolous
Geoff McLachlan
Stuart Newstead
Terence O'Neill
Ken Russell
Ian Saunders
David Smith
Albert Trajstman
Richard Tweedie
Emlyn Williams
Jeff Wood

Neville Weber
Secretary, SSAI

Notice of the Special General Meeting of the Statistical Society of Australia Inc.

to be held on Tuesday, 24 November, 1998 commencing at 5.45pm in Manning Clark Theatre 4 at the Australian National University, Canberra.

AGENDA

1. Apologies and proxies.
2. Rule Changes.

A special resolution will be put to the meeting to change the Rules of the Society as per details sent to each Branch Secretary.

The purpose of the resolution is to replace the term "Chartered Statistician" by "Accredited Statistician" and the abbreviation "CStat" by "AStat" wherever they occur in the Rules.

Copies of the Special Resolution can be obtained from Branch Secretaries or from the Society Secretary on request.

3. Date and place of the next meeting.

Neville Weber,
Hon. Secretary

Honorary Life Membership

As you may have noted in the ASC14 summary, Nick Fisher, Ron Sandland and Richard Tweedie were made Honorary Life Members of the Society in July.

The following citations list some of their valued contributions to Statistics and the Society over many years.

Nicholas Irving Fisher

Nick Fisher's service to Statistics has been on a broad front, strongly based on his work within his division of CSIRO and the links this has provided. But it goes a long way beyond that.

Within CSIRO, Nick has been important in building a very successful Program in Industrial Statistics, emphasising Quality Improvement and more recently Performance Measurement. He has enhanced the reputation of statisticians across the organisation by his work and his networking.

He has been invited to present lectures and courses on Quality Improvement to other CSIRO Divisions and to the American Statistical Association (amongst other organisations). Nick has been on the ISI Committee on Industrial Statistics since 1990 and is currently Deputy Chair.

Nick has made a huge contribution to the Geosciences and has sharply lifted the profile of Statistics in those areas in which he has worked. He was chair of the Statistics in the Earth Sciences section of the SSA from 1982 to 1990, and has represented the SSA on the Australian Earth Sciences Council since 1983. He has served as an editorial correspondent for the International Assoc for Math Geology. Nick has also been on the Bernoulli Society committee on the Physical Sciences since 1990 and chaired this committee from 1990 to 1994.

His research on computer intensive statistical methods has flowed into editorial board roles on Journals of Computing and Graphical Statistics and Statistics and Computing; he is currently co-editor of the latter. Nick is on the advisory editorial board for the Wiley series in Probability and Mathematical Statistics. Wiley is one of a small handful of leading publishers in this field.

The largest and most successful (by many measures) Statistical conference held in Australia was SISC'96. Nick's enormous contribution as Conference Director has been widely acknowledged. The conference certainly raised the International profile of Australian Statistics and Statisticians as well as raising the awareness of our discipline in Australia. Nick has been on the program committee for numerous other conferences and is on the program committee for the ISI meeting in Helsinki in 1999.

Other service to the discipline has a strong international flavour. Nick is international representative on the ASA board and a member of the Interface Foundation board. Within Australia, he is a foundation member of the SSA accreditation committee, was a member of the HLM/Pitman medal committee and has served as council member and Branch president in NSW. He has also been Secretary of the Biometric Society (Australian Region).

Ronald Lindsay Sandland

Ron Sandland has made many significant contributions to the discipline of Statistics and to the Society over the past 20 years. The most notable of these contributions during the last ten years have been made through two key positions he has held.

1. He has been a CSIRO Divisional chief since 1988, firstly in Mathematics and Statistics and, following a merger, Mathematical and Information Services.

Under its various Chiefs, but most notably Alf Cornish and Joe Gani, DMS provided excellent service to CSIRO and proved an outstanding basis for the career development of a large number of Australia's leading Statisticians. Times changed; the Division was almost disbanded in 1987. As Chief, Ron has turned this around and built a revitalised Division. Ron has had a vital role in raising the influence of Statistics and the Division in CSIRO. The Division grew from 40, with an uncertain future, to 110 before mergers have seen it grow to more than 250. He has led it to its new Industry focus, ensuring that this focus is broadly based. He is widely regarded as being one of the best managers and Chiefs within CSIRO.

2. He was President of the Statistical Society of Australia in 1993-94, but has contributed to the Society over a much longer time scale and broader front. The major issue during Ron's term as President was accreditation although the discussion started

long before; a key meeting chaired by Ron took place in 1992 in Perth; the final vote was taken in 1996. He also set up the working party to consider closer collaboration between SSAI and NZSA. This was the start of discussions leading to the merged journal. Ron was invited to be a member of the Australian Statistical Advisory Council when he was President and he is still a member of that Council.

Ron has also made a substantial contribution to increasing the profile of Statistics and Statisticians in the Quality Movement. He served on Standards committee QR/4, playing a major technical role in drafting Standards for the use of Control Charts and other SPC tools in industry. He was leader of the DMS Industrial Statistics project in 1987-88. His earlier consulting reports formed the basis for the Division's entry into industrial applications of statistics. He has also contributed to the wider use of Statistics in maintenance and other service industries. Another area in which his work has furthered the role of Statistics in Policy Development is his application of his research on capture-recapture methods to estimation of numbers of drug users and prostitutes.

Ron Sandland is a Fellow of the Australian Academy of Technological Sciences and Engineering.

Richard Lewis Tweedie

Richard Lewis Tweedie is Professor in the Department of Statistics, Colorado State University, Fort Collins, and was Chair from 1991 to mid 1997. Prior to that he was Foundation Dean and Professor of Information Sciences at Bond University (1987-1991), Managing Director of Siromath Pty Ltd (1981-1987) and a member of the (then) CSIRO Division of Mathematics and Statistics (1974-1981).

Richard played an important role in the Society over a number of years. He has had an active committee role at Branch level in four different branches, and was the founding Editor of the Newsletter of the

Society (1972-1982). He was President of the Society in 1985-1986.

Richard's research record in applied probability and statistics is outstanding by any standards. His published work can be classified into three major groups; the first concerns his work in Markov processes. This work has been highly original, theoretically difficult, and has had a very major impact in a number of applied fields. The second group is largely applied statistical research, while the third group is concerned with computational and graphical methods in statistical inference.

Richard is a committed and natural teacher with high standards for the design and delivery of courses. He is equally at home whether he is communicating with undergraduates, his peers or business executives. At Bond University, he was successful in promoting the learning of statistics by every undergraduate through his development of the core subject in computing and data skills. A considerable number of innovative computer based learning modules were developed for this subject under his direction.

Prior to joining Siromath in 1981 as its General Manager, Richard established a substantial record in consulting in statistical and probability modelling in a variety of discipline areas inside CSIRO. At its peak, Siromath had a staff of 35 and played an important role in convincing many people in business and industry of the importance and value of statistical ideas. At this time also, Richard was active in promoting the use of statistical thinking in the quality management movement, playing a founding role in the Total Quality Management Institute, an organisation which ultimately transformed into the current Australian Quality Council.

Richard was elected a Fellow of the American Statistical Association in 1997.

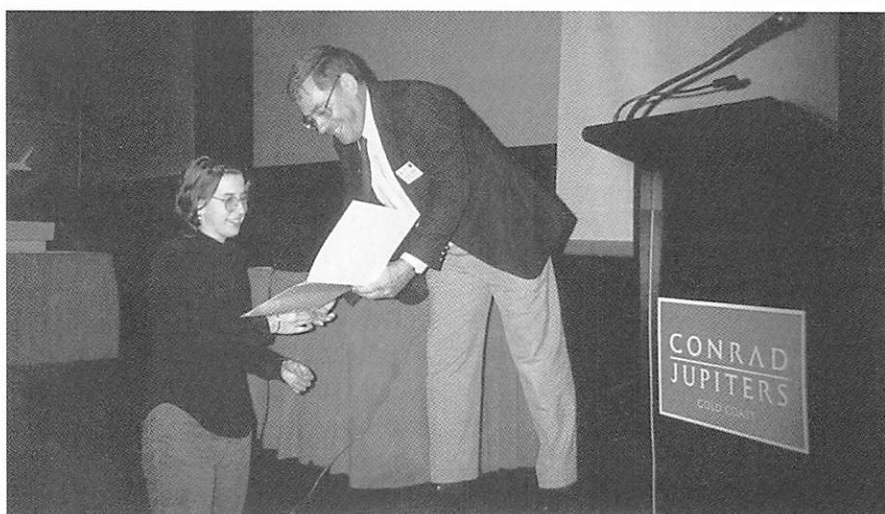
EJG Pitman Prize for "Young Statisticians" 1998

This prize is awarded for the most outstanding talk presented by a "young statistician" at the Australian Statistical Conference. Only members of the Statistical Society of Australia Inc are eligible for consideration. For the purposes of the prize, a "young statistician" is a person studying on a part time or full time basis, without age limit, or a person with a Bachelor's degree awarded within the last 5 years, or a person with a postgraduate degree awarded in the past year.

The criteria for evaluation include:

- a) motivation and setting the general context of the talk;
- b) organisation and structure of the talk;
- c) originality of the substance of the talk; and
- d) presentation of the material and speaker's rapport with the audience.

The prize was first offered in 1996; the 14th Australian Statistical Conference being only the second occasion the prize was awarded. The 47 entries in 1998, approximately four times the number in 1996, indicated the growing enthusiasm of the Society's "young" members. But they also presented a scheduling challenge to the pro-program organisers and the prize committee selected by the SSA Council. The 1998 committee of



Petra Kuhnert being awarded the EJG Pitman Prize by Des Nicholls for the best student paper.

John Field, Joe Gani, David Griffiths and Helen MacGillivray, owe the conference program committee thanks for their efforts in scheduling the entrants' talks within the confines of a coherent session structure, with minimal overlap.

There were only two entrants' withdrawals during the conference; this is a tribute to the young statisticians' dedication. Another withdrawal was due to a severe case of laryngitis; the student suffered the additional tension of listening to her supervisor give her presentation.

The committee met before the conference to set up an agreed evaluation scheme. It convened

every day of the conference to discuss the day's talks, ensure consensus in the evaluations, and review previous decisions in order to ensure consistency through the week. Each of the four criteria a), b), c), and d) above were assigned a score along a (non-linear) scale ranging from excellent, very good, good, to average and below average, and these were used as a guide for the committee's discussions. For those who may be involved in the Pitman Prize in future either as an entrant or member of the prize committee, it may be reassuring to learn that the committee consistently found itself to be in close agreement on the merits of the talks given throughout the week.

The committee wishes to congratulate each and every one of the presenters. Although the talks varied in their overall quality, their general standard was most impressive, with 11 talks or 23% of the entrants being very highly commended. The standard set by a number of the "young statisticians" was an example for speakers generally, whatever their "age" or field of research.

Some characteristics of the commended talks were:

- a) excellent time awareness and organisation of the talk;



Alain Vandal receives the NZSA Prize for a student paper

Although it can be highly appropriate and effective to refer to other papers in the same session, each entrant's paper should be able to stand alone. Apart from the standard observations that the audience must clearly gain from any visual material presented by entrants, and that details should be included only if essential in emphasizing key points, it may also be worth considering whether an outline in the form of a contents page is sufficiently effective to justify the time it uses.

What the prize committee would

like to stress very clearly is that almost every entrant's talk showed evidence of careful thought and preparation underlying the presentation. Even though live presentations are subject to some amount of random perturbation, thoughtful organisation and structure will always display themselves. The prize committee wishes to offer its warmest congratulations to all the entrants who uniformly demonstrated the talent, ability, commitment and enthusiasm characterizing the Society's "young statisticians".

Highly commended speakers, in alphabetical order, are:

Mitchum Bock
Richard Fraccaro
Andrew George
Lyle Gurrin
Sonia Knight
Ky Mathews
Heather Podlich
Annette Scott
Christopher Turville
Alain Vandal
Virginia Wheway

and the winner of the 1998 EJG Pitman prize is:

Petra Kuhnert

Conference Report

Environmetrics Conference

The Ninth International Conference on Quantitative Methods for the Environmental Sciences, organised by 'The International Environmetrics Society' (TIES) was held at the Gold Coast, Queensland, on 3-6 July 1998. It attracted about 90 participants from 12 countries, with about 50% from Australia and 30% from North America.

There were 8 keynote addresses from a range of eminent speakers. These covered a wide range of topics, ranging from global scale to relatively local. Noel Cressie (Iowa State University, USA) gave a fascinating account of spatio-temporal modelling, in real time, of rapidly-arriving large data sets from satellites, where a suitable balance has to be obtained between the sophistication of the model and the ability to process the data fast enough. Also on the global theme, David Brillinger (University of California, Berkeley, USA) spoke about assessment of risks posed by space debris for satellites, space stations and space craft. Other speakers chose more 'earthly' topics; for example Tom Beer (CSIRO, Melbourne, Australia) discussed the measurement of ambient air quality in Australia, Ross Prentice (Fred Hutchinson Cancer Research Center, Seattle, USA) described research attempting to relate nutrient consumption to

chronic disease risk, and Alan Welsh (Australian National University, Canberra) questioned when it was valid to apply some widely used distance sampling methods to estimate plant or animal population size.

Interspersed between the invited speakers there were 62 contributed papers, generally in two parallel sessions. A common thread through these was several sessions comprising a 'Workshop in Honour of Ian B MacNeill'. The keynote address by Emanuel Parzen (Texas A & M University, USA) entitled "Statistical methods mining and non parametric quantile domain data analysis" launched this workshop, and was followed by many talks on subjects in which Ian MacNeill has made research contributions. It is a pleasure to note that Ian was present at the conference and able to enjoy this tribute to his work.

Despite a packed program, it wasn't all work and no play. The welcoming cocktail party was well attended, and most participants attended the barbeque and bush dance held on the Saturday night. There were clearly a few experienced dancers, and a lot of others prepared to give it a go.

The prize for the best student paper was shared between Åsa Danielsson (Linlioping University, Sweden) for her talk "Spatial scales for nutrients and metals in the marine sediments of Kattegat/Skagerrak", and Lynne Scott (University of South Australia) who spoke on "Development of a seagrass-fish habitat model: a seagrass residency index for economically important species". The best poster prize was won by Bronwyn Harch (CSIRO, Adelaide, South Australia) on the topic "Understanding soil diversity".

The conference was very successful, with a very wide range of applications of statistics and mathematics to environmental problems being presented. The smooth running of the conference was due to the magnificent efforts of the local organising committee, in particular Ray Correll, Bronwyn Harch and Lisa Weller.

TIES will hold its next conference in conjunction with The Committee on Probability and Statistics in the Physical Sciences of the Bernoulli Society for Mathematical Statistics and Probability, in Athens, Greece, on 23-27 August 1999. It is entitled "Environmetrics and Statistics in the Earth and Space Sciences".

Warren Müller
CSIRO, Canberra

Letter to the Editors

To: The Editors, SSAI "Newsletter"
19th June 1998

Sirs,

I would like to congratulate the Society on two counts, both related to a welcome appreciation of its greater awareness of the opinions of its Members. First, I am on record at an Annual General Meeting of the Western Australian Branch as registering my dissatisfaction with the wide gap between the aim of the stated Editorial Policy for a balance between theoretical and applied articles, to include papers related to Australia and of general interest., and what was actually published, mainly esoteric contributions from overseas. I am glad my remarks

seem not to have gone unnoticed.

Secondly the "Newsletter" in its new layout is another desirable advance.

But surely if you want feedback from Members you need a bold and positive "Letters" Section to encourage it. And as we have three Editors, which one should our contributions be sent to! If it is Mr Brinkley he should tell us clearly and not be shy!

Yours sincerely
(Dr.) Frank Hansford-Miller
(WA Branch)
"Kangaroo View" 9561-1823
8 Hazeltine Court
Yanchep WA 6035

The Editors of the Newsletter are grateful to Dr Hansford-Miller for his comments. As you will see from Page 2 of this issue, we have already acted on one of his suggestions – nominating one of the three Editors as the recipient of editorial correspondence. The Newsletter Editors would very much like to have Dr Hansford-Miller's "bold and positive 'Letters' Section"; to achieve that we need bold and positive letter-writers!

Write to us with your views on the statistical issues of the day. Subject to the usual rules governing publication of such material, we would be delighted to include them in the Newsletter.



STATISTICIANS

Polartech Ltd is a high-technology biomedical company developing instrumentation for the detection of cancer. We are embarking on a major clinical trials program and require the services of bright, enthusiastic, degree-qualified statisticians, preferably with experience in SAS. Salary will be negotiated on the basis of experience and qualifications.

Enquiries and applications to:

Dr John Evans, Polartech Ltd

Level 1, 140 William Street, Sydney 2011

Telephone (02) 9358 3276; fax (02) 9368 1070

Australasian Conferences

Seventh International Applied Statistics in Industry and Manufacturing Conference, 14-16 December 1998, Melbourne RMIT

Information: Mali Abdollahian, RMIT Dept of Statistics & Operations Research, Melbourne; tel (03) 99252248; fax (03) 99252454; e-mail rstma@pitman.ma.rmit.edu.au; Conference information http://www.isai.org/7th_int.shtml

Australasian Genstat Conference: Applications, Advancements and Enhancements, 3-5 February 1999, Erskine House, Lorne, Victoria.

Information: <http://www.nre.vic.gov.au/science/genstat99>, email genstat99@goldy.agvic.gov.au, John Reynolds, Convenor, Local Organising Committee, fax (03) 9742 0201

15th Australian Statistical Conference, 3-7 July 2000, Adelaide. Information: <http://www.sapmea.asn.au/15ASC.htm>

There is a list of Australasian statistics conferences for 1997 and 1998 at:

<http://www.maths.uq.oz.au/~gks/webguide/conf.html>

Genstat '99

Applications, Advancements and Enhancements

Preliminary Announcement

Lorne, Victoria
3 – 5 February 1999

The Australasian Genstat Conference will be held in Lorne, Victoria, from 3 – 5 February 1999.

Lorne is a scenic drive of about 2 hours from Melbourne heading south west along the Great Ocean Road. It is a relaxed beach resort and fishing village with a variety of cafes and restaurants, two pubs, art and craft galleries, and a picture theatre. Lorne is often used as a base for visitors who wish to explore the Otway Rainforests, the Shipwreck Coast and the Twelve Apostles.

Transport from Melbourne to Lorne (leaving Melbourne on the afternoon of Tuesday 2 February) will be arranged for conference delegates. Return transport will also be arranged for the afternoon of Friday 5 February.

The venue for the conference is Erskine House, a "Country House Hotel" on the beach at Lorne. Erskine House, one of the first conference centres in Victoria, was constructed in 1868 and has had a series of additions and alterations, most notably in the 1930s.

The rambling buildings are nestled in 6 hectares of gardens which include five lawn tennis courts, two all-weather tennis courts, 18-hole putting green, four lawn bowls greens, and four manicured croquet lawns. From the private gardens there is direct access to the beach – great for an invigorating early morning walk or a body-surf before lunch.

The Conference

Australasian Genstat conferences attract an interesting mix of enthusiastic statistical practitioners drawn largely from the biological, agricultural, environmental and food sciences. Informality is the keynote. The conferences not only bring the developers of Genstat into direct contact with users, they also represent real opportunities for applied statisticians with varied backgrounds to share experiences and to explore applications and advances in statistics utilising Genstat.

The conference is being hosted by the Biometrics Group of Agriculture Victoria, a business of the Department of Natural Resources and Environment (DNRE).

Program and Workshops

The organisers intend to facilitate one or more Genstat-related workshops or short courses in Melbourne before the conference (1-2 February) and welcome comments and suggestions

concerning topics for the short courses and the conference program.

Information about the conference and venue is available on the web site:

<http://www.nre.vic.gov.au/science/genstat99>

Suggestions and requests for further preliminary information should be sent to:

email: genstat99@goldy.agvic.gov.au

John Reynolds, Convenor, Local Organising Committee, fax: (03) 9742 0201

Seventh International Applied Statistics in Industry and Manufacturing Conference

RMIT, Melbourne
14 – 16 December 1998

Program Chairman:

Mali Abdollahian,
RMIT University,
Melbourne VIC 3001
RSTMA@laplace.ma.rmit.edu.au

Conference Program

The 7th IASIM conference focuses on presenting applied statistics methods and techniques to industry and manufacturing practitioners. This applied statistics conference is oriented around practical workshops as well as applied statistics paper and case study presentations. The emphasis is towards material of immediate use for industrial and manufacturing applications. The ISAI conference also seeks to expose industrial practitioners to categorical, spatial, directional, and other applied statistics methods that have only recently been recognised for their usefulness in industrial applications. Case studies from industry are particularly welcome.

Conference Information

Requests for additional information regarding this conference should be sent to:

Bradley Brown
IASIM Conference Chairman
PO Box 782948
Wichita, KS 67278-2948, USA

Fax: (316) 689-6889

brad@isai.org

or from the ISAI web site at:
http://www.isai.org/7th_int.shtml

15th Australian Statistical Conference

Adelaide
3 – 7 July 2000

The 15th Australian Statistical conference will be held in Adelaide from 3 to 7 July 2000. The conference will be held in the

Adelaide Hilton International Hotel which fronts onto Victoria Square in the heart of the city of Adelaide.

The Organising committee has already negotiated with a local company SAPMEA to be the conference organiser, and up-to-date details about the conference will be held at the conference website at <http://www.sapmea.asn.au/15ASC.htm>

We invite all members to join us in Adelaide at that time, but more particularly, we are interested in your ideas and suggestions. You can submit suggestions via email through the website.

The Program Committee met for the first time during the conference at the Gold Coast and has already mapped out the broad structure and identified Large and Complex Data

Sets as the major theme for the conference.

Organising Committee

Richard Jarrett Chair
Sandra Pattison Secretary
Ian Saunders Treasurer
Gary Glonek Chair Program
Brenton Dansie Chair, Local Arrangements

Program Committee

Gary Glonek Chair
Kaye Basford
Philip Bell
David Griffiths
Richard Jarrett
Tony Pettitt
David Scott
Glenn Stone

Richard Jarrett
Conference Convenor

Overseas Conferences

Seventh International workshop on Matrices and Statistics, in Celebration of T.W. Anderson's 80th Birthday, 11-14 December 1998, Fort Lauderdale, Florida, USA.

Information: <http://www.polis-nova.edu/MST/con/FMW/>

International Biometrics Conference, 13-18 December 1998, Cape Town, South Africa.

Information: Lynne Billard, Department of Statistics, University of Georgia, Athens, GA 30602, USA; fax +1 (706) 542-3391; email lynne@stat.uga.edu.

Fifth International conference on Combinatorics, Statistics, Pattern Recognition and Related Areas, 28-30 December 1998, University of Mysore, India.

Information: Bhu Dev Sharma, Mathematics Department, Xavier University, New Orleans, LA 70125, USA; email bsharma@mail-xula.edu; or Sat N. Gupta, Department of Math/Statistics University of Southern Maine, Portland, Maine 04103, USA; email sgupta@usm.maine.edu; or N.R. Mohan (Local Secretary), Department of Statistics, University of Mysore, Mysore 570006, India, email chairman@giasbg01.vsnl-net.in; or Satya Mishra, Department of

Mathematics and Statistics, University of South Alabama, email mishra@mathstat.usouthal.edu; website www.mathstat.usouthal.edu/~kulkarni/mysore.html

16th International Symposium on Combining Data from Different Sources, 5-7 May 1999, Statistics Canada, Ottawa, Ontario, Canada.

Information: Christian Thibault, HSMD, Statistics Canada, Tunney's Pasture, Ottawa, K1A 0T6 Canada; email thibchr@statcan.ca

International Conference on Statistical Methods and Forest Models, 19-21 May 1999, Moscow, Russia.

Information: Dr Victor Teplyakov, Deputy Head RFFS, Headquarters-Research Department, Federal Forest Service of Russia, Pyatnitskaya Str. 59/19, Moscow 113184, Russia; email tapl@forest.msk.su or George Gertner, Leader IUFRO S4.11.01 (Statistical Methods) W503 Turner Hall, Department of Natural Resources and Environmental Sciences, University of Illinois, Urbana, IL 61801; fax +1 (217) 244-3219; email gertner@uiuc.edu.

5th International Decision Sciences Institute Conference, 4-7 July 1999, Athens, Greece.

Information: Program chairman, Prof. S. Zanakakis, Florida International University, email dsi_athens@fiu.edu or conference co-chairman Prof. G. Doukidis, Athens University of Economics and Business, email douk@aueb.gr; <http://www.dsi99.athens.gr>

52nd Session of the International Statistical Institute, 11-18 August 1999, Helsinki, Finland.

Information: ISI Permanent Office, 428 Prinses Beatrixlaan, PO Box 950, 2270 AZ, Voorburg, The Netherlands; tel 31-70-337 5737; fax 31-70-386 0025; email isi@cs.vu.nl; website <http://www.cbs.nl/isi/>.

School on Modern Statistical Methods in Medical Research, 6-24 September 1999, International Centre for Theoretical Physics, Trieste, Italy.

Directors: J.L. Hutton, E.J.T. Goetghebeur and P.J. Solomon; Sponsors: UNESCO and IAEA

Information: email smr1122@ictp-trieste.it or sci_info@ictp.trieste.it; website <http://www.ictp.trieste.it>; International Centre for Theoretical Physics, PO Box 586, I-34100, Trieste, Italy.

Society Secretaries

Central Council

President: Prof. D. Nicholls
Secretary: Dr N.C. Weber
Email: neville@maths.usyd.edu.au

New South Wales

President: Ms J. Kelly
Secretary: Dr A. Pope
Email: pope@frey.newcastle.edu.au

Canberra

President: Dr R. B. Cunningham
Secretary: Ms J. Webb
Email: j.r.webb@abs.gov.au

Victoria

President: Dr G. Laslett
Secretary: Mr G. Bruton
Email: geoff.bruton@buseco.monash.edu.au

South Australia

President: Ms S. Pattison
Secretary: Dr G. Glonek
Email: gary@stats.flinders.edu.au

Western Australia

President: Dr J. Speijers
Secretary: Dr M. Hazelton
Email: martin@maths.uwa.edu.au

Queensland

President: Dr G. Smyth
Secretary: Dr R. Wolff
Email: r.wolff@qut.edu.au

Section Chairs

Statistics in the Medical Sciences
Dr Lynette Lim
Email: llim@mail.newcastle.edu.au

Statistics in the Biological Sciences
Dr Simon Barry
Email: simon.barry@anu.edu.au

Survey and Management
Dr David Steel
Email: david_steel@uow.edu.au

Statistical Education
Dr Brenton Dansie
Email: brenton.dansie@unisa.edu.au

Statistical Computing
Dr G. Stone
Email: glenn.stone@cmis.csiro.au

Industrial Statistics

Ms T. Dickinson and Dr G. Robinson
Email: theresa.dickinson@cmis.csiro.au

Young Statisticians

Miss V. Wheway
Email: virg@cse.unsw.edu.au

Further contact details for Society Secretaries and Section Chairs can be obtained by contacting the Society on (02) 6249 8266

Out on the town ...



Pictured at the NSW branch post-meeting dinner in June (left) Brad, Ky Mathews (speaker), Abie Ekangaki, (right) Peter Thomson, Jos Beunen, Susan Hoffmann.



The Young Statisticians dinner at ASC 14.