

The New Zealand Statistical Association

nzsa.rsnz.org

Newsletter

Number 68

September 2008



NZSA2008 Conference - Hamilton

Official Report

This conference was held at the University of Waikato on the 1st and 2nd of September 2008 and was hosted by the Statistics Department. There were almost 100 participants, who were joined on the second day by 30 secondary school teachers from the Waikato, Bay of Plenty and Auckland regions. With contributions from more than 50 participants we were able to run 3 parallel sessions. The AGM was held at the end of the first day and was followed by a young statisticians' event, just before the conference dinner. At this event, Kathy Ruggiero shared some of her experiences getting established and this was followed by a lively discussion.

We had two keynote speakers. On the first day, Charmaine Dean (Simon Fraser University, Canada - pictured right) gave a talk entitled "Spatial and Mixture Models for the Analysis of Recurrent Events". As part of the Statistics Education theme, on the second



day the keynote address was given by Sharleen Forbes (Statistics New Zealand and the School of Government, Victoria University). Her talk was entitled "Trying to surf the education wave with official statistics".

We also invited speakers in Probability and Stochastic Processes. These were Estate Khmaladze (Victoria University of Wellington), Jeff Hunter (Massey University), Peter Smith (University of Canterbury) and Mark Holmes (University of Auckland). On the second day, the invited speakers were M. Beatrix Jones (Massey University), Katya Ruggiero (University of Auckland), Ken Dodds (AgResearch) and Sharon Browning (University of Auckland) in Statistical Genetics, while David Scott (University of Auckland), Yong Wang (University of Auckland) and Paul Murrell (University of Auckland) were invited speakers in Statistical Computing. Unfortunately, due to a mix-up with travel plans, Estate was not able to join us and we were grateful to Roger Littlejohn who gave a talk in his place.

As part of the Statistical Education theme, there were contributed talks from John Harraway (University of Otago), Maxine Pfannkuch (University of Auckland), Ian Westbrooke (Department of Conservation) and Rolf Turner (STARPath) and in the afternoon, there workshops for the teachers, ably run by Mike Camden (Statistics New Zealand), Maxine and Pip Arnold (Team Solutions, University of Auckland). This day was well received by the teachers.



Statistical Education workshop presenters Maxine Pfannkuch, Ian Westbrooke, Pip Arnold and Mike Camden holding book vouchers from Pearson Education

Published by the New Zealand Statistical Association (Inc.), P.O. Box 1731, Wellington, New Zealand. The views expressed by contributors to this *Newsletter* should not be attributed to the New Zealand Statistical Association.

We had eight student presentations, (7 talks and 1 poster). Ray Hoare (Hoare Research Software) provided the \$1000 prize money for the best student presentations. There were three awards made and these were won by Stephen Taylor, Gang (John) Xie and Kevin Chang (pictured below). The prizes were awarded by Ray at the conference dinner, where he announced that this will be the last year he will offer prize money. We thank Ray again for the contributions he has made to the annual conferences over the years, see http://nzsa.rsnz.org/HRS_student_prizes.shtml



Stephen Taylor, Kevin Chang, Ray Hoare, and Gang (John) Xie. Stephen Taylor and Gang (John) Xie were joint winners (\$350 each) of the best oral presentation and Kevin Chang was awarded \$300 for his poster presentation

We also thank the following organisations, who provided sponsorship: The Royal Society of New Zealand hosts the NZSA website where the conference page was located; Statistics New Zealand sponsored an event for young statisticians and also provided paper and pens for delegates; Bennetts Campus Bookshop gave conference discounts and book vouchers; Pearson Education New Zealand also gave book vouchers; and SAS provided conference bags, drink bottles and pens for the delegates and also books for presentation to the invited speakers. Thanks also, to the University of Waikato and AgResearch for giving staff time to help with the organisation.



Participants at the keynote presentation by Sharleen Forbes

There are many people who contributed in some way to making this conference the success it was. Roger Littlejohn and other members of the NZSA Executive Committee and also members of the Department of Statistics at the University of Waikato provided valuable input at various stages of the

planning process. I particularly thank James Curran who was responsible for abstract submission and organising the programme, and Mashewaran Rohan and Maxine Pfannkuch for their work in organising the programme for the Education Session. Roger Littlejohn also did an excellent job with the website and Harold Henderson and Catherine Cameron managed the registrations.

Judi McWhirter Convenor - Local Organising Committee

A Student's Perspective

As a student at the conference, I received a warm welcome and felt involved from beginning to end. Charmaine Dean took time during her opening talk to cover topics that she felt might not be familiar to all post-grads. The student talks were highlighted in the program, well attended, and very generous prizes were awarded. The final statistical computing session on Tuesday afternoon discussed practical ways of sharing ideas and computer code (a topic of interest to many post-grads).

Of note for me, was the talk that Mike Doherty gave titled 'Variance for Petition Estimators', a.k.a. "why the smacking ban petition failed the first time." Even though the topic is well outside my area of study, it was a well-presented, captivating problem that Mike was clearly interested in.

The highlight of the conference for me was meeting and comparing notes with the other young statisticians at the pre-dinner event. Though, at 36, I got a ribbing about calling myself 'young'! Maybe the name should be changed to new statisticians? Or junior statisticians? It was a pleasure to hear Kathy Ruggiero talk about her experiences. She was kind enough to let us quiz her about how to find help and support whilst we are learning the ropes. Charmaine also joined in and lent a Canadian perspective to the discussion.

I look forward to returning next year and would definitely encourage students who did not attend this year's event to give it a go.

Miriam Hodge



Ray Hoare with some student presenters: (L-R) Gang (John) Xie, Marie Fitch, Ray Hoare, Stephen Taylor, Miriam Hodge and Maheswaran Rohan

Conference Brief

See Gordon Smyth's Australasian conference list http://www.statsci.org/conf/index.html

Third IAPR International Conference on Pattern Recognition in Bioinformatics (PRIB 2008)

Melbourne

15-17 October 2008

Web: http://www.infotech.monash.edu.au/about/news/conferences/prib08/

New Zealand Mathematics and Statistics Postgraduate Conference

Whitianga

18-21 November 2008

Email: http://www.math.auckland.ac.nz/Events/2008/nzmasp08/

Workshop: Experimental Design

University of Melbourne

1 Dec 2008

Web: http://www.dpi.vic.gov.au/genstat2008/

Australasian GenStat Conference, 2008: Biometrics in Primary Industries and the Environment

Marysville, Victoria 2-5 December 2008

Web: http://www.dpi.vic.gov.au/genstat2008/

Half-Day Workshop for Women Researchers In The Mathematical Sciences in New Zealand

Christchurch

Sunday 7 December 2008

Email: v.kirk@auckland.ac.nz

MISG2009 The Mathematics and Statistics in Industry Study Group

Wollongong

27-31 January 2009

Web: http://www.uow.edu.au/informatics/maths/research/misg/index.html

One Day Meeting of Palmy-STATISTICIANS

Presented by

Institute of Fundamental Sciences Massey University, Palmerston North

Venue: Bernard Chambers A - Fernwood Room

Date: 24 October 2008 (Friday)

Time: 9 am - 5 pm

Keynote speaker: Prof Jeff Hunter

Lunch and Refreshments will be provided on the day.

The purpose of this forum is to bring statisticians in and around Massey University together for a day at our Institute for the presentation of their current research work and group discussion on issues relevant to applications.

Coordinators:

Ganes (s.ganesalingam@massey.ac.nz) Alasdair (a.d.noble@massey.ac.nz)

Short Courses in Statistical Genetics

A subset of the Summer Institute in Statistical Genetics will be offered at the University of Auckland, New Zealand during 9-16 December 2008.

Six modules will be available:

Population Genetic Data Analysis

Quantitative Genetics

QTL Mapping

Association Mapping

DNA Evidence

Computing for Statistical Genetics.

Details are available at

http://www.stat.auckland.ac.nz/sisg2008/ or contact Bruce Weir (bsweir@u.washington.edu) or Sharon Browning (s.browning@auckland.ac.nz).

Introductory Statistics Courses in Auckland

Dave Saville, a consulting agricultural research biometrician, will be running courses at the University of Auckland at Tamaki in Oct/Nov (these are a repeat of those run at Lincoln in July/August):

(A) Basic statistics/analysis of variance,

Tues-Thurs, October 21-23

(B) Simple regression and analysis of covariance, Tues-Wed, November 11-12.

Both are introductory/refresher courses which start "from scratch". The courses are especially designed for people involved in experimental or other applied research work. For more information email Dave at savillestat@gmail.com (he'll get back to you within 24-48 hours - or phone him at 64-3-325 9365).

Editorial

Most readers will be aware of how hard our computers try to help us in our everyday tasks. The products of one software company in particular (but which shall remain nameless) are indefatigable in their efforts to improve on our every move, in their insistence that they know what we are



trying to do far better than we do ourselves. Sometimes I feel as if I spend half my working life trying to counter these efforts. By way of illustration, I present here the results of a brief survey of names from past submissions to the newsletter, as they would appear if my computer's suggestions had been followed. See how many you recognize:

Maxine Prankish

Rachel Festers

John Faraway

Brian Curdle

Else Sidelines

Beatnik Jones

Marco Resale

Seesaw Chick

Carl Carrots

Siva Garnish

Shirley Pledges

Duncan Elderly

Steak Chekhovian

David Hatred

Richard Seducible

John Daily

Roger Kissing

Milk Black

Raises Canadian

Frances Arsenic

George Sober

Arid Verbally

Peter Allspice

Judi Chirper

Tacos Solaris

How fortunate the individual whose name is so bizarre that the spell-checker just shrugs its shoulders and pronounces "No suggestions"!

This is my last Newsletter - Esther Meenken is taking over next year. Thanks to all the contributors over the past two years, and to Harold and Roger for their invaluable help.

Gruff Bones

Vacancy - Scion (NZ Forest Research Institute)

An exciting opportunity has arisen, in our Forest Biosecurity and Protection team, for an enthusiastic Scientist, with biometrics, statistical design or mathematical modelling expertise The scientific focus will be on modelling the spatial and temporal dynamics of newly introduced or established forest pest species (insects, pathogens, weeds), and quantifying their effects on hosts. Important contributions will also be made to our research on modelling fire behaviour and in the general forestry area.

For further information see:

<u>http://scionresearch.recruitmarshal.com/jobcentre/applycod.asp?job=765</u>

Submissions to the Newsletter

The Newsletter welcomes any submissions of interest to members of the NZSA. News about New Zealand statisticians, statistical meetings, statistical organisations, statistics in education, or statistical curiosities are suitable for inclusion. Letters that raise issues of importance to statistics in New Zealand are also welcomed. Photographs of recent gatherings and new appointees are of particular interest. Electronic submissions are preferred.

Next deadline 22 February, 2009

Advertising In the Newsletter

The Newsletter accepts advertising of interest to statisticians in New Zealand. Advertising is placed subject to space considerations. Personal advertising by NZSA members will be published free. Other advertising is \$250 per page, \$140 per half page, and \$75 per quarter page. Other sizes can be quoted on request. All advertising requests should be directed to the editor.

Editor

Geoff Jones

IIS&T, Massey University

Private Bag 11122, Palmerston North, N Z Phone: +64-6-350-5799; Fax: +64-6-350-2261

Email: g.jones@massey.ac.nz

Newsletter on Web

An online version of this newsletter is available at http://nzsa.rsnz.org/Newsletter68/index.htm
It will be regularly updated with information and your letters.

Email: g.jones@massey.ac.nz

President's Column



As my term as NZSA President has now come to an end, it's a good opportunity to think back over the events of the last two years, a time which has had many highlights for me.

There have been three conferences over this time, which have been a great pleasure to attend as

they have expressed the robust energy in the Association. They have had contextual worries, particularly with the ASC/NZSA 2006 finances which were something of a marathon to finalise, but very satisfying to know that we got them right in the end (even if that's what we thought the organisers were paid to do). Special thanks to Harold Henderson for this.

The journal has received a lot of attention over these two years, revising the contract with Blackwell, planning the non-editorial management structure, and facing changes in publisher, editor and the wider world of print. We have become significantly closer to the SSAI, and now we are planning a Joint Venture together. I'm pleased with the level of contribution that NZSA has been able to make to this ongoing process.

I'm also pleased that we've been able to revise the constitution in a way that brings it up to date with our current practice without too much controversy. We now also have a policy document giving guidelines for Exec procedure, and a corresponding document for conference organising committees. I suspect they will get the amount of attention that that sort of document usually gets, but it's a relief to know that these issues can slip off the radar for a few years.

My thanks to Exec members. I apologise for the times that meetings have gone over the hour when there has been a lot of business to conduct. I'm assured that now we will be kept strictly to time.

Roger Littlejohn



Incoming and former Presidents - how many can you name?

New members

A warm welcome to 11 new members of the NZSA who have joined since April 2008, taking our current membership to 394.

Regular members: Dongwen Luo (rejoined), Paul Cowie, William Grant, Nuovella Williams, Victoria Johnston, Sawsan Al-Shamaa, Stella Sim, Jose Garcia, Lee Kupferman.

Student members: Kevin Chang, Kyoko Fukuda.

Join the NZSA

A membership application / change of address form is available at http://nzsa.rsnz.org/form.php

NZSA Membership rates

Given rates apply from April 2008 - March 2009 and are in NZ\$.

	NZ	Overseas
Ordinary	80	85
Student & Retired	40	45
Electronic only journal	-5	-5
SSAI Member	45	50
(journal funded from	SSAI	membership)

Back Copies of NZ Statistician

A CD archive of "The New Zealand Statistician" is available from the NZSA. For details see http://nzsa.rsnz.org/archive_NZS.shtml.

Copies of this CD are available for

Current members \$5 Past members \$25

Non members and libraries \$55

To order a copy email Harold Henderson (Harold.Henderson@agresearch.co.nz).

ANZJS - Book Review Editor

The Australian & New Zealand Journal of Statistics needs a new Book Review Editor. Responsibilities will include maintaining contact with publishers, finding suitable reviewers, monitoring reviews, and ensuring a steady stream of high quality book reviews for each issue of ANZJS. If interested, please contact Prof Kerrie Mengersen, k.mengersen@qut.edu.au. There is no fixed closing date. The vacancy will remain open until filled by a suitable candidate.

Awards

Campbell Award and Life Membership of NZSA - Sharleen Forbes

At the Annual General Meeting of the NZSA Conference in Hamilton in September, Sharleen Forbes was given life membership to the Association. Later that evening, Sharleen was presented the NZSA Campbell Award in recognition to her contribution to statistics.



The mother of four adult children. Sharleen has worked at Statistics New Zealand since 1994; first as Manager Public Policy then as Chief Analyst, General Manager Strategic and Financial Services, General Manager Statistical & Methodological Services, and currently as General Manager Statistical Education & Research in conjunction with an Adjunct Professorship in Official Statistics at the School of Government, Victoria University, Wellington. In the past she has worked as both a secondary school mathematics teacher and university lecturer in mathematics and statistics. She has a long-standing interest in mathematics education, in the measurement of gender and ethnic differences in mathematics in particular, and in the application of simple techniques to explain longitudinal data.

For a number of years Sharleen convened a small collective of women (EIME – Equity in Mathematics Education) that carried out several research projects and published reports such as "Mathematics for All' (Forbes, Blithe, Clark & Robinson 1990) and "The Testing of Girls in Mathematics" (Blithe, Clark, Forbes & Forbes 1994). She has been a long-standing member of the International Association of Women in Mathematics Education (IOWME), and an active committee member of the New Zealand Statistical Association. She was elected as President of this Association from 1997-1999, and in 2001 was elected as the first New Zealand female member of the International Statistics Institute (ISI).

In August 2000 she graduated with a PhD (done, in the main, extramurally from Curtin University of Technology in Perth) on the topic of "Measuring Students' Education Outcomes: Sex and Ethnic Differences in Mathematics". This led to her being

asked to co-share a plenary session with Prof Gila Hanna of Canada at the Mathematics Education into the 21st Century Conference in Jordan in November 2000, and to be the Bevan Werry Memorial Speaker at the New Zealand Mathematics Association Conference in 2001.

Her current personal research outside the work place involves surveying voluntary organizations that hold meeting, but not membership, registers.

She is a keen tramper and mountain trekker having climbed Tapuae O Uenuku (New Zealand), Mt Kosciuszko (Australia), Mt Kilimanjaro (Africa) and to the base camp of Annapurna (Nepal). She also enjoys canoeing, biking, gardening, science fantasy and family time.



Sharleen (centre) after receiving her Awards with Jenny Brown (left) and Roger Littlejohn (right).

Campbell Estate Fund

The NZSA was the recipient of a very generous donation (\$48,000) from Professor Campbell's estate.

There is roughly \$1500 funding available each year for special projects that are in the realm of Professor Campbell's interests. Refer to http://nzsa.rsnz.org/funding.shtml for more details.

Applications are received twice a year (April/October) and are invited for funding for projects in 2008/09. There is no formal application process but please supply details of your project, the full project budget, the amount you are requesting, a short statement about why your project is within Professor Campbell's interests, and your full contact details.

Please send your applications to the Secretary, Richard Penny (rnpenny@stats.govt.nz), NZSA, PO Box 1731, Wellington.

For more details contact Roger Littlejohn (roger.littlejohn@agresearch.co.nz) or Harold Henderson (harold.henderson@agresearch.co.nz).

Roger Littlejohn

Statistics Education News

International News

Joint ICMI/IASE Study, Statistics Education in School Mathematics: Challenges for Teaching and Teacher Education. The International Commission on Mathematics Instruction (ICMI) and IASE ran a very successful joint study focused on statistics education



research in June 2008 in Monterrey, Mexico. Carmen Batenero was chair of the International Programme Committee of the joint study. Pip Arnold, Maxine Pfannkuch (The University of Auckland) and Tim Burgess (Massey University) from New Zealand presented papers. Proceedings from this study can be downloaded from: http://www.ugr.es/~icmi/iase_study/

ICME (International Congress on Mathematical Education). At this conference in Monterrey, Mexico, 6-13 July 2008, there were two topic studies groups on research and development in the teaching and learning of statistics and probability. The statistics papers can be downloaded from: http://tsg.icme11.org/tsg/show/15 and the probability papers from: http://tsg.icme11.org/tsg/show/15 and the probability papers from: http://tsg.icme11.org/tsg/show/14. New Zealand was well represented in the statistics topic with John Harraway (Otago University), Pip Arnold, Maxine Pfannkuch, and Gillian Frankcom-Burgess (The University) of Auckland) presenting papers.

OZCOTS 2008 - 6th Australian Conference on Teaching Statistics. This conference was held in Melbourne in July. The focus of the conference was on learning, teaching, and assessing tertiary statistics. There was an international line up of invited speakers including Chris Wild (The University of Auckland). Many other New Zealanders contributed to the conference: Murray Black (AUT), Doug Stirling, Siva Ganesh (Massey University), Nathaniel Pihama (SNZ)

CensusAtSchool - Second International Workshop. CensusAtSchool is an international attempt to increase statistical literacy of students by providing exciting activities that are closely aligned to each country's school curriculum (See: http://www.stat.auckland.ac.nz/~iase/islp/census). The group met in Los Angeles in July 2008 at the UCLA. Chris Wild and Pip Arnold presented a well-received talk about "CensusAt School NZ: a Means to Many Ends" and Pip Arnold also ran an innovative workshop on Growing Scatterplots.

USCOTS 2009 - United States Conference on Teaching Statistics, June 2009, Ohio State University. Similar to the Australian OZCOTS, this conference is focusing on undergraduate level statistics education, targeting statistics teachers. Chris Wild is a plenary speaker.

The Sixth International Forum on Statistical Reasoning, Thinking and Literacy. This Forum will be held in Brisbane 10-16 July 2009. The topic under study will be the role of context and evidence in informal inferential reasoning. Initial proposals have already been sought. For more information see: http://srtl.stat.auckland.ac.nz/srtl6/research forums.

Sixth IASE Satellite Conference, South Africa, August 2009. This conference will be held before the ISI-57 Conference. The theme of the conference is Next Steps in Statistics Education, with a focus on tertiary statistics teaching. Deadline for submission of papers is 30th November 2008. For more information see: http://www.stat.auckland.ac.nz/~iase/conferences.php.

The Eighth International Conference on Teaching Statistics will be held in Slovenia, 11-16 July 2010. John Harraway (Otago University) is Chair of the International Programme committee. There is a stunning list of plenary speakers for this conference (Hans Rosling, Gerd Gigerenzer, Cliff Konold, Jessica Utts, Anuska Ferligoj) and a plenary panel coordinated by Chris Wild. If you want to contribute to any of the topic sessions please indicate your interest now to the topic convenors (See: http://icots8.org/).

Local News

NZSA Conference Education Day, Waikato University. On the 2nd September 2008, 30 teachers from Auckland, Waikato and Bay of Plenty attended a strand of the conference, which focused specifically on statistics education in secondary schools. The keynote address was given by Sharleen Forbes (Statistics New Zealand). Contributed talks in the morning session were given by John Harraway (University of Otago), Maxine Pfannkuch (University of Auckland), Ian Westbrooke (Department of Conservation), Rolf Turner (STARPath, University of Auckland). In the afternoon session, participants chose from workshops offered by Mike Camden (Statistics New Zealand), Pip Arnold, (Team Solutions University of Auckland) and Maxine Pfannkuch (University of Auckland).

Maxine Pfannkuch

NZSA Education Committee

The Education Committee has had a full and active twenty-second year, including meetings every two months. Early in the year, Sharleen Forbes announced her withdrawal, which comes after 21.5 years of membership. We hope that this withdrawal is reversible! We thank Sharleen for her great contributions of expertise over those years, and for being a large part in founding the Committee. We also would like to extend our congratulations to Sharleen both on getting the Campbell award, and on being given life membership of the Association for her contributions in statistical education and beyond.

A highly successful Education Day was held at the recent annual conference. Teachers from as far away as Auckland and Tauranga attended. Sharleen Forbes gave the plenary session. Four presentations followed, on innovative teaching resources, informal inference, data exploration for the rock wren, and achievement in NCEA. Overall, they gave the message that statistics is accessible and useful for students; and that methods for delivering it are rapidly developing. The afternoon held a series of four workshops, with all of these being presented by members of the Education Committee.

The Curriculum for the final level at school now contains: 'make inferences from surveys and experiments ... using methods such as resampling and randomisation to assess the strength of evidence'. These methods arose in several contexts at the Education Day. Is NZ mad to have these in school, or just way out in front?

The committee has been steadily moving away from being just a Wellington-based group to being far more nationally representative. The next obvious region to recruit committee members from is Christchurch, as the teleconference facilities, so kindly made available by Statistics New Zealand, are available there. This would be particularly advantageous, with NZAMT 2011 being held in Christchurch. Christchurch is also the current hub of NZAMT, and this also presents a significant opportunity for closer liaison with them. A wider input from Statistics New Zealand would also enrich the committee.

Bridging the gap between teachers and statisticians is a crucial challenge for the committee. We now have some active classroom teachers on the committee, but would appreciate more of them to be involved.

Mike participated in the Western Australia Mathematics (Teachers') Association conference in August. Teachers there, as here, are increasingly aware that 'Chance and Data' (aka probability and statistics)

is accessible and in fact essential for school students. It seems that students value it, not because they perceive it as easy, but because they perceive it as relevant. The next generations of adults there and here may be much better at using and assessing evidence for decisions.

Curriculum Project The committee has had a major ongoing focus on inputting to the new curriculum for primary and secondary schools. Now that the new curriculum is in place, the committee has been working alongside the Ministry of Education to help provide input into, and review of, supplementary support materials for the curriculum. This will include more detailed "Tier Two" materials to further develop ideas more briefly covered in the curriculum, as well as a glossary of mathematical terms. Our curriculum is the envy of many other countries, and is one we can be proud of.

NCEA and Scholarship We continue making submissions about and reviewing the achievement standards relating to NCEA. Our request to NZQA and MoE to be involved in the review of these standards has been well received. The standards are currently being revised, with NZAMT leading the revision. The committee intends to take a very active role in this. The Ministry is also keen for the committee to review and comment on the standards as they are under production. This is in addition to being supportive for the committee's input into the materials for the NCEA or scholarship assessments.

The redesign of the NCEA Achievement Standard, and the Unit Standards, in Statistics, is vitally important. The advances that NZ has made with the Curriculum will succeed only if they emerge in the country's assessments.

Upcoming Conferences NZAMT 2009: The Association continues to give support to this biennial conference by providing funds for a plenary speaker. The aim is to give an ongoing presence for statistics in this forum. At the 2007 conference at St Cuthbert's College, Auckland in late September, our sponsored plenary speaker was Maxine Pfannkuch. The committee is actively pursuing names for the 2009 speaker. We would like to encourage all statisticians, especially those in the central and southern parts of the North Island, to consider offering talks or workshops at the 2009 conference at Palmerston North

MERGA 2009: Next year's Mathematics Education Research Group of Australasia meets next July in Wellington. Again it would be good to see the statistics community presenting at this in significant numbers (hopefully at above the 5% level).

Alex Neill, Mike Camden.

Statistics Strand Teacher Education Workshop

(Nick Horton, pictured right, from Smiths College in Northampton, MA was on sabbatical at the University of Auckland during semester one. He sends this report on a teachers' meeting in Auckland. Ed.)



The Auckland Mathematics Association had a very successful term two get-together, focused on the statistics strand, on Saturday, 14 June. Approximately 100 teachers gathered for a keynote address by Chris Wild of the University of Auckland as well as workshops organized by teachers. As an observer in the midst of a sabbatical semester in Auckland, I was struck by the vitality and energy of the presenters and participants (a commendable, common and endearing Kiwi trait).

Chris began the morning with a provocative address about how to introduce informal inference for Years 8-13. His talk fleshed out the new curricular framework, which develops statistical thinking about descriptive summaries, sampling variability and inferential statements. Chris used a series of animated movies to describe samples from the Census at Schools database (http://www.censusatschool.org.nz) to illustrate his points and motivate the audience. A pointer to his handouts as well as the recorded lecture with slides can be found at http://tinyurl.com/6bsk6n.

After a question and answer period, and a called business meeting for the AMA, there were 3 sets of parallel workshops (several repeated in multiple time slots). More information on the workshops and several handouts can be found at http://tinyurl.com/aucksecmaths.

Maxine Pfannkuch prototyped a classroom activity for drawing an inference from an experiment, based on her work with secondary students. A resampling method (part of the new standards for Year 13) was used to assess the strength of evidence for making a claim when comparing two designs for a flying object, and workshop attendees were able to replicate the analysis process using the student data.

Pip Arnold presented a workshop called *Sleeping Sheep* which uses a BBC activity to collect data about reaction times. This activity, targeting Year 10-11

students, could be adapted for a variety of ages. Handouts (available at the above URL) on this activity include a teaching plan along with relevant worksheets and a workshop plan for those who might like to use it as a workshop for teachers.

Carolyn Leersnyder described "debatable statistics" for Year 11 students, by posing the question that if tomorrow's weather can't be correctly predicted, how can scientists predict climate in the future? This is a great context for teaching aspects of probability, such as long run averages and the difference between theoretical and experimental results. Carolyn also presented a second workshop on how scientists use time-series data in their real work. She provided a bigger picture for time series, along with several meaningful contexts (many locally based) and stimulating examples of what we can teach in this area (handout available).

Lindsay Smith discussed a level 2 statistics course for students who wish to continue with mathematics in Year 12 but whose needs suggest a minimal focus on algebra will be appropriate (handout available).

Richard Mackrory, a former chemical engineer, shared thoughts and practical activities for curve fitting, based on his work in industrial research and teaching experience.

Anne Blundell used a series of poorly written articles in the media to motivate a discussion of statistical literacy for all levels. Gal's (2002) worry questions were used to provide a framework for interpreting the news around us.

Murray Black introduced a computer based workshop using excel to construct and interpret confidence intervals for proportions. Examples included manufacturing, the food industry and business.

Beatrix Jones and Daniel Walsh discussed a statistical declaration of independence, for situations where observations are not independent. An example based on modeling multiple paternities ("cuckolding") in birds was used to motivate the workshop (handout available).

Other talks included a reprisal by Jason Florence of his successful 2007 AMA Statistics day presentation on heuristic probability (a glimpse into the hidden side of probability), while Anna Martin described resampling and confidence intervals.

I was impressed that 100 people would volunteer their time to learn more about what's happening in this realm. I left the workshop full of ideas and activities for my work in secondary and tertiary statistical education

Nicholas Horton nhorton@email.smith.edu

ANZJS Corner

There are changes afoot for ANZJS. Kerrie Mengersen will be stepping down as Managing Editor toward the end of 2008, so as well as needing a Book Review Editor there will be an additional vacancy on the editorial panel. If you are



interested in either position, please contact Kerrie <<u>k.mengersen@qut.edu.au</u>>. There is also discussion underway with Wiley/Blackwell about electronic tracking of papers submitted to ANZJS in future. The system they recommend is Manuscript Central. Just how this system would impact on journal operations will be discussed in more detail at the editors' meeting, planned for Melbourne at the end of November. The joint venture between NZSA and SSAI to run ANZJS is also currently under discussion (through the NZSA and SSAI Executives, since this is not an editorial matter).

The NZSA Exec agreed that the advantages and disadvantages of 'Open Access' for ANZJS as a publication method should be discussed at a special session at the NZSA Conference in Hamilton, but this session could not be programmed for the conference, and has been held over. Again, this decision is a matter for the SSAI and NZSA Executives, and for you as members of the Association(s), rather than an editorial matter (except in terms of the operational

consequences).

A further issue that needs to be resolved, given the more limited level of support for the journal now available from employers, is editorial running costs. The previous Managing Editor and Theory and Methods Editor lived in Melbourne, where the publisher Wiley-Blackwell is also based. The current editors (who are from Brisbane, Canberra, Wollongong, Wellington and Palmerston North) have no budget, although the publishers do pay A\$4,000 as a contribution to the Societies' editorial costs of publishing the journal. Without this money being made available by the Associations to the editors, face-toface meetings will continue to be difficult to arrange and the clerical aspect of journal operations will remain severely under-resourced. This matter requires early resolution.

It is obvious from the Wiley-Blackwell Annual Report (http://www.wiley.com/legacy/annual_reports/ar_2008/) that a



key focus of the Editorial team must be the relevance, content and impact of the journal. The editors would like feedback from you about how you would like to see ANZJS develop. For example, what do you want to read, and what makes a good applications paper? Let us know. After all, it's your journal.

Stephen Haslett ANZJS Theory and Methods Editor

Read the latest in statistics from Australia, New Zealand and the world online today

Published on behalf of the Statistical Society of Australia Inc. and the New Zealand Statistical Association

- Applications
- Theory & Methods
- Reviews
- Historical and General Interests

SSAI members can access the Journal for FREE through Blackwell *Synergy* at

www.blackwell-synergy.com/loi/anzs

Simply log on using your member number and provided password for complete access to abstracts and full articles from the Journal.

Forgotten your password? Contact Ms. Lei Hattori, Customer Service Officer - Blackwell Publishing at e-mail: synergy@asia.blackwellpublishing.com or on Tel: (03) 8359 1014. 10



Managing Editor: Professor Kerrie Mengersen

 Print ISSN:
 1369-1473

 Online ISSN:
 1467-842X

 Current Volume:
 48

Frequency: 4 issues per volume

-

GenStat 2008

The Australasian GenStat Conference, 2008: *Biometrics in Primary Industries and the Environment* is to be held at Marylands Country House, Marysville, Yarra Valley Ranges, Victoria, Australia on 2-5 December 2008.

The early bird registration deadline and date for submission of abstracts have been EXTENDED until 30 September

There will be a pre-conference workshop in Experimental Design, at the University of Melbourne on 1 Dec 2008. Information on the pre-conference workshop, a template for submission of abstracts, and other practical information are available on the website www.dpi.vic.gov.au/genstat2008.

This conference traditionally has a friendly atmosphere and attracts a mix of consulting biometricians and people developing methods for applied statistics, not all of whom are GenStat users. It is a chance to meet the GenStat developers and to hear about new features in the package, but a major focus is on biometrical applications and new developments in biometrics.

ICOTS8



The next International Conference on Teaching Statistics is being held in Ljubljana, Slovenia, 11-16 July 2010. The Conference Theme is data and context in statistics education: towards an evidence-based society.

The conference website is now open, but is still under development: http://icots8.org/

Keynote speakers are:

Anuska Ferligoj, University of Ljubljana

Gerd Gigerenzer, Max Planck Institute for Human Development

Cliff Konold, University of Massachusetts

Hans Rosling, Karolinska Institutet

Jessica Utts, University of California

There will also be a Plenary Panel and Debate coordinated by Chris Wild, University of Auckland.

Science Fairs

The NZSA, along with Statistics New Zealand, have continued to jointly sponsor an award for the best use of statistics at each of the 24 regional science fairs. In most regions the award is judged by NZSA members or members of the statistical community. Along with the prize (or in some cases prizes) for best use of statistics, we have also been able to offer certificates for excellent use of statistics which has enabled us to recognise more students.

The 2008 science fairs are being held throughout August and September. This year, Statistics New Zealand have indicated their preference for the award (totalling \$120 per fair) to be split at most 2 ways. This has worked well in most regions; however some of the more rural regions have suggested that they would like to continue their practice of splitting the award into smaller denominations. All parties agreed to show some flexibility this year. However this is an issue that will need to be worked through early next year (see also comments below - Ed.). Another area for improvement next year will be the wider promotion of the award to schools so that students can plan their projects to include more statistical components.

I would like to thank all the volunteers who have contributed their time to judging the statistics award and finally, if anyone would like to assist with judging in the future (particularly in the regions away from the main centres) please contact the science fair coordinator.

Tim Hawkes

More on Science Fairs ...

Alasdair Noble and Geoff Jones are seeking the opinions of NZSA members on a number of issues related to Science Fairs.

Firstly, what do members think about the splitting of prize money into at most two parts? It seems Statistics New Zealand prefers this, but the NZSA should have a say as they contribute half the prize money. Do we need a policy that overrides the preferences of the regional organizers and the discretion of the judges?

Secondly, and particularly for those who have judged Science Fairs in the past, we would appreciate your thoughts on what makes for "good statistics" in a science project. What should we be looking for, and what should we be giving prizes for? Is there anything that really "gets your goat"?

We would appreciate any responses by email to a.d.noble@massey.ac.nz or g.jones@massey.ac.nz.

Geoff Jones Alasdair Noble

Local Scene

Victoria University

First up from Victoria is some exciting news concerning quite a few new arrivals, plus their mums and dads. That's new children of existing VUW staff, rather than new staff - but maybe that type of succession planning for staff could be the way to go? Anyway, our School Manager Ginny Whatarau and her husband Rick celebrated the happy arrival of their daughter, Janayah, on 19 March 2008. Ginny was on parental leave until mid July, but she is now back managing us all again, very efficiently. Ginny says that Janayah likes to know what's going on, so sometimes she checks up on her mum two or three times a night. Consequently Ginny is often at work pretty early at the moment. In Ginny's absence over the last four months, Rowan McCaffery did an excellent job as the acting School Manager - thanks Rowan!

Other parts of the School obviously decided that they needed some new arrivals too, so Duncan McEwan and his partner Vic happily obliged with the birth of their son Ben on Wednesday 2 July at about 4pm. Duncan's parental leave has meant the rest of the Programmers are keeping busy, while Statistics and Operations Research (in particular) were delighted to learn of the arrival of Mark Johnston's new son Hamish. He was born on Sunday 27 July at 5:30pm, weighing in at 4.3kg (that is 9 pounds 8 ounces) and 54cm long. He'd kept his mum, Emily, and dad (plus the rest of us!) waiting for about a

week and a half past his due date, so the fact he is quite a big boy isn't too surprising. Hamish spent the first 24 hours in ICU having a few problems with his breathing but he is fine now, as are his mum and dad. The photo on the right, taken on his first day, shows Hamish sticking his tongue out (just a little bit).



In other news, about our more academic activities, Richard Arnold was sponsored by the Ministry of Health to attend the scientific meeting of Novartis vaccines in Siena, to present on the effectiveness of the Meningococcal B vaccination programme in New Zealand. Richard was also on the organising committee of the International Society for Bayesian Analysis Biennial World Meeting, which took place in Australia for the first time this year. The conference, which

Richard attended on Hamilton Island from 21-25 July, was a showcase for both Australian and New Zealand research in Bayesian methods and applications, along with researchers from all over the world.

Stefanka Chukova participated in two conferences in Bulgaria in June, both on the Black Sea coast. The first one, on Informing Science (IS) and Information Technology Education, was held in Varna; the second, the XIII International Summer Conference on Probability and Statistics, was held in Sozopol. In March, Stefanka and her husband David walked from Waikanae (on the Kapiti coast) to downtown Wellington over three consecutive weekends. The total distance of their trip accumulated to more than 100km! They are planning a walking trip in Nepal at the end of the year.

Estate Khmaladze hosted Valerian Wrobel, from Ecole Polytechnique, for a three month internship from May to July. Valerian was working on "Khmaladze transformations for linear hypotheses", and on 30 July he gave us a seminar on that topic before he returned to France. Estate's two current PhD students, Giorgi Kvizhinadze and Haizhen Wu, have had a joint talk accepted at a forthcoming conference, also in France. The topic of their current research, which is joint with Estate, is "The diversity of opinions in opinion polls and related topics". Estate says that, surprisingly, the topic turns out to be intimately connected with the difficult theory of large deviations and contiguity of probability measures. Estate also mentions that he has recently discovered a very good Pinot Noir from Tohu Wines, but he wishes it wasn't quite so expensive!

Ivy Liu took over from Stefanka Chukova as the Programme Director for Statistics and Operations Research in March 2008. Stefanka had been the Programme Director since July 2005, so we're all very grateful to her for directing us so well for nearly three years! We're also really grateful to Ivy for taking on the job now:-).

Shirley Pledger spent June on a research visit to the University of Kent (at Canterbury), England. In July, Shirley was an invited speaker at the International Statistical Ecology Conference in St Andrews, Scotland and then she attended the International Biometrics Conference in Dublin, Ireland. Having seen a fair bit of the British Isles, Shirley is now back with us in Wellington.

Tony Vignaux is celebrating 40 years at Victoria University of Wellington. He became Foundation Professor of Operations Research in January 1968, moving office down one floor in the Rankine Brown building from the DSIR applied mathematics division. Some things have changed over the last 40 years from the Elliott 503 to the Dell Pentium 4 on his

desktop. Some things have not changed - Tony always wears a tie when teaching. Highlights of his 40 years include being awarded a prize as one of Victoria's top 100 lecturers of all time, serving as president of the OR Society (and the NZ Statistical Association too - Tony likes stochastic OR!), and sabbatical visits to Hawaii, Berkeley, Warwick and Oxford. Tony observes that a good trend in OR is the development of free and open source software (possibly a shameless plug for his "SimPy" discrete-event simulation package in Python, see http:// simpy.sourceforge.net/) and a bad trend is that we now seem to teach OR techniques rather than modelling real problems. However, Tony feels that he enjoys OR a lot more now that he has retired and does not have to do any university administration.

John Haywood

University of Otago, Maths and Stats

Several of the statisticians in the Department (Richard Barker, Claire Cameron, Peter Dillingham, David Fletcher and Chris Fonnesbeck) made their way to St Andrews to attend the International Statistical Ecology Conference in July. Richard Barker took the long route through the United States and Europe, catching up with former PhD student Matt Schofield now on a post-doc at Columbia University NY, and then through Montpellier where he spent time with Jean-Dominique Lebreton. David Fletcher took the occasion to celebrate his recent wedding with relatives in Switzerland and the UK, before meeting up with Chris Fonnesbeck, Peter Dillingham and last year's William Evans Fellow, Mike Conroy, for a three-day tour of Islay, where seven of the world's best whiskies are made: they carried out an intensive sampling program and came away with some interesting results...

As well as attending the ISEC conference in St Andrews, Scotland, Claire Cameron (PhD student in Statistics) also gave a talk at the IBC in Dublin. Claire commented, "It was a great opportunity to meet up with people that I hadn't caught up with for a long time and to see a little bit of Scotland and Ireland. It was also inspiring to see leaders in the areas I research in presenting their work. I went to a talk by the famous (in Statistics) Sir David Cox, where many photos were taken and I learned more about William Sealy Gosset (aka 'student') on the 100th anniversary of the publication of the first paper on the t distribution."

Irene Goodwin

University of Auckland

Congratulations are due to several of our PhD students. Christian Roever, who completed his PhD with Renate Meyer last year, won a prestigious university Best Doctoral Thesis award. Kristy Su has been awarded her PhD, and Steven Miller sailed smoothly through his oral exam. Jenny Wilcock won the first prize in the poster competition at the ASC in Melbourne, and she was in good company: the three ASC prizes all went to New Zealanders.

Patricia Metcalf received the NZ Medical Association's Richard Robinson Award for excellence in medical writing, for her 2006 paper in the NZ Medical Journal: "Trends in major cardiovascular risk factors in Auckland", coauthored with Robert Scragg, David Schaaf, Lorna Dyall, Peter Black and Rod Jackson. Fortunately, the excitement of prize-winning did not emerge as a major cardiovascular risk factor, and the authors have been able to enjoy their success with the help of a cholesterol-free beverage rich in antioxidants.

George Seber (pictured right) celebrated his 70th birthday in style in April, with a lunch in Old Government House crammed with colleagues from his long career spanning five decades and two departments at the University of Auckland. George joined the Department



of Mathematics in 1965, and became the university's first Professor of Statistics in 1972. He founded our department in 1994, and 14 years later still seems to be getting younger every year. From this we can deduce that the secret to long life and happiness is to write an average of 0.26 statistics textbooks a year for 38 years.

We are pleased to welcome our new visitors Charmaine Dean and Thomas Lumley. Charmaine is the founding Chair of the Statistics Department at Simon Fraser University in Vancouver, and is fresh from presenting the keynote talk at the NZSA conference in Hamilton this month. Thomas is a well-known member of the R Core Team from the Biostatistics Department, University of Washington in Seattle. Both visitors are staying in Auckland till the end of the year. We were also fortunate to host Professor Helen MacGillivray, from Queensland University of Technology, in May. Helen gave several thought-provoking seminars and workshops on university teaching and promoting innovation in pedagogy and content.

The department's Marsden awardees from 2007

are progressing apace with their new projects. Marti Anderson gained an \$800,000 grant to explore underwater ecosystems on the Lord Howe Rise seamount using underwater submersibles. The submersibles go down to a massive 1000m, where the ocean is dark, scary, and full of unknowns. Marti's project is among the first to use manned (or even womanned) submersibles in the southern hemisphere. Marti gained a huge response to her advert for two PhD students, with a total of 183 applicants from around the world. (Name the last statistics PhD advert to have generated this many applicants!) The best two applicants were - naturally - both Kiwis, and the lucky recipients Adam Smith and Kirsten Rodgers will be starting on the project in November. The first trip into the (very) deep blue yonder will take place in 2009.

Meanwhile, Yong Wang's Fast-Start Marsden has already delivered a fast start to Steve Taylor, the Masters student working on the project. Steve won joint first prize from his first conference presentation, at the NZSA 2008 conference in Hamilton, for his presentation on a fast algorithm for computing nonparametric survival functions.

Chris Wild has done a round-the-world conference crawl over the last 3 months, giving invited talks at the Western North American Region of the Biometric Society in California, OZCOTS in Melbourne, the International Biometric Conference in Dublin, the 2nd International CensusAtSchool Workshop at UCLA, and the Joint Statistical Meetings in Denver. He also visited Ray Carroll at Texas A&M University. He has settled back home to get some work done before presenting three more invited talks in Japan in December, including IASC 2009.

And finally, Rachel and Regan Cunliffe have celebrated the arrival of their baby son, Eli Daniel David. Not leaving anything to chance, Eli guaranteed his lucky stars by arriving judiciously on 8th August-known in numerological circles as 08/08/08. The time of arrival? 08:08 am naturally ... well, plus or minus two standard editorial licenses of 8 minutes each.

Rachel Fewster

Scion (NZ Forest Research Institute)

Rod Ball has arrived back from Finland where he worked with Mikko Sillanpää on gene mapping statistical methods at the University of Helsinki, and also learnt a bit of Finnish. While there he gave a short course on association mapping in the Combi (Computational and Molecular Biology) graduate school including R (Petri Koistenen) and BUGS (Bob O'Hara) workshops. From Helsinki he travelled to

the IUFRO conference in modelling and simulation at Koli National Park (eastern Finland, near Joensuu) where he gave a talk on smoothing spline models, then visited Prof Outi Savolainen at Oulu University and gave a talk on case studies in association mapping to the members of the biology and statistics departments. From Oulu it was north to sample camping and hiking in the midnight sun in Lapland (Urho Kekkonen and Lemmenjoki national parks and Inari) before returning to NZ at the end of July via the ISBA (International Society for Bayesian Analysis) world conference at Hamilton Island, Australia. At ISBA, and also the NZSA conference at Waikato, he presented a poster: "Case studies in association mapping - frequentist and Bayesian measures of evidence", (including Bayesian re-analysis of results from the Diabetes Genome Initiative of Harvard, MIT. Lund and Novartis; and the Wellcome Trust case control consortium) and had the opportunity to discuss analysis of large scale case-control studies with Peter Donnelly and Damjan Vukcevic from the Wellcome trust (Oxford University), who also had a poster.

During ISBA, news arrived that we have been successful with our proposal for a 'Virtual Institute of Statistical Genetics' (see last issue). The proposal was top-rated in the LNNR (Leveraging New Zealand's Natural Resources) portfolio. The VISG consists of statisticians and geneticists from CRIs and Universities and will develop statistical methods to tackle the large amounts of genomic data becoming available with current gene technologies relevant to gene mapping in New Zealand. This is the first time FRST has funded a programme dedicated to statistical method development since the early 1990s when they decided they would not fund statistics and operational research 'per se'. Funding has been approved for 5 years at around 900k per annum, and is going to contract shortly.

The programme will cover four project areas: large datasets (e.g. whole genome mapping and prediction), structural genetics (polyploidy and copy number variation), population structure, and experimental design. The Virtual Institute will utilise eResearch technology (KAREN network and high performance computing) for collaboration in multi-organisational teams. The VISG expects to fund several PhD students or PostDocs. Expressions of interest to Phil.Wilcox@scionresearch.com, or to Rod.Ball@scionresearch.com.

Also on the computing front, we have been experimenting with the Condor (grid computing) system with application to computationally intensive problems in bioinformatics (Lucy MacDonald) and Wood Technology (Jonathan Harrington, Benoit Hiroux, Paul Milliken). Condor is a job scheduling

system developed at the University of Wisconsin that theoretically allows utilisation of 98-99% of CPU time that is spent idle on most PCs in a company intranet. Large speedups are possible for jobs that can utilise that level of parallelism (e.g. image processing calculations), although currently Benoit reports success only on a single multi-processor server.

Scion is currently advertising for a biometrician: see advertisement on page 4.

On the 25th of September we're hosting Professor Tony O'Hagan (pictured below), who has been visiting New Zealand following the ISBA conference. Professor O'Hagan will give a talk on prior elicitation - the process of incorporating experts' prior knowledge in probability distributions for use in Bayesian statistics. He is the author of the book: "Uncertain Judgements, eliciting experts' probabilities" (Wiley 2006). The talk is scheduled for 10:30am in the Totara room at Scion, 49 Sala St., Rotorua (all welcome).

Rod Ball



Tony O'Hagan speaking at the ISBA conference in Hamilton Is.

Crop & Food Research

The news of the possible merger of Crop & Food and Hort Research came as, well, news to the C&F biometricians. However, the "I met them at a conference" network went into action, and Ruth Butler and Nihal DeSilva have been discussing how the biometrics groups work in the two organisations. Conspiracy theorists will no doubt make something of the fact that Ruth had been in discussions with Peter Alspach of Hort Research about hosting a workshop by Brian Cullis and Ari Verbyla on mixed models for genetic improvement (crop and animal breeding programmes). The workshop will be held at Lincoln on 24-27 February 2009. Contact Peter (PAlspach@hortresearch.co.nz) to register an interest. The exact programme will depend on the interests of the attendees, and will be opportunities for participants to apply the techniques to their own data.

Duncan Hedderley

Massey University, Albany

In late July Beatrix Jones and Howard Edwards both attended the International Society for Bayesian Analysis conference (ISBA2008) in Hamilton Island Australia. Beatrix presented a paper entitled "Bayesian parentage analysis using multiple imputation" and Howard a poster entitled "A survey of graduate courses in Bayesian statistics". One of the most memorable features of the ISBA conference is a closing cabaret, where the words of popular songs are modified to pertain to the subject of the conference. Howard was featured singing and playing keyboards for the song 'Always take your prior with you' to the tune of Crowded House's 'Always take the weather with you.'

At the end of July we said farewell to Tasos Tsoularis, who is moving to a position in the UK after eight years at Massey.

Dr Chris Volinsky from AT & T Research Labs Florham Park, New Jersey, is currently visiting the Statistics and Information Technology groups at IIMS. During his period here he will deliver lectures on Data Mining, and exploring research interactions with the Institute's staff. He has also given a seminar "Recommender systems for fun and profit".

The group was well represented at the NZSA conference with Jeff Hunter and Beatrix Jones both giving invited talks and Marie Fitch and John Xie student presentations. Congratulations to John Xie on being a joint winner of the student prize.

Marie Fitch

Wellington Statistics Group

The Wellington Statistics Group (WSG), a local group of the New Zealand Statistical Association (NZSA), continues to meet regularly. The following are recent talks given to WSG:

- 12 Sep 2008, Walter Zucchini, University of Goettingen. "Hidden Markov models for circular-valued time series."
- 9 Sep 2008, Walter Zucchini, University of Goettingen. "Two applications of statistics in biology."
- 3 Sep 2008, Walter Zucchini, University of Goettingen. Workshop on "Hidden Markov Models" at the Royal Society of NZ, 11 Turnbull St.
- 3 June 2008, Pra Murthy, University of Queensland, Australia. "Warranty: An Introduction."
- 23 Apr 2008, Nicholas Horton, Smith College, Northampton MA, USA. "What your physician should know about statistics but perhaps doesn't: The implications of the increasing sophistication of statistical methods in medical research."
 - 3 Apr 2008, Ray Chambers, University of

Wollongong, Australia and NZSA Visiting Lecturer for 2008. "Measurement Error in Auxiliary Information."

18 Mar 2008, Jiancang Zhuang, Institute of Statistical Mathematics, Tokyo. "Visualizing patterns in earthquake clusters using a point process model."

4 Mar 2008, Martin Bland, University of York, UK. "Risedronate, the BBC, and me."

We also have a planned talk coming up in October 2008 by Jim Ridgway (University of Durham, UK).

Further details (abstracts, etc) of these and all previous talks can be found on the NZSA Local Groups web page (http://nzsa.rsnz.org/local groups.shtml). This web page also contains contact details for WSG, names of sponsors, and details of forthcoming talks. In addition, a link can be found there so that people can add or delete their names from the mailing list.

If anybody is visiting Wellington at a time coinciding with a talk, then you are most welcome to attend. No registration is required. We are also keen to receive offers of talks from people who have something they would like to present. Many individuals work in isolation from other statisticians and often have little opportunity to discuss their work with others. WSG aims to provide a forum for such people too.

We'd very much like to hear from anyone in the Wellington region who would be keen (OK, maybe just willing!) to take over the WSG treasurer's job from Alistair Gray, since Alistair has been doing that since 2001 and he definitely has earned himself a well-deserved rest.

David Harte

Department of Conservation

Statisticians survived the recent Department of Conservation restructure, keeping numbers at two, Ian Westbrooke and Maheswaran Rohan. Unfortunately, we did lose significant groups of scientists - all of our small social science group, and half our marine scientists, while retaining terrestrial science almost intact.

It has been conference season - with Rohan attending the ASC in Melbourne, and the associated R workshop. Ian headed to holiday in Greece and Germany before presenting a poster at the International Statistical Ecology conference in St Andrews and attending IBC in Dublin. Rohan helped to organise the NZSA meeting in Waikato, including coordinating the very successful teachers' day, and Ian and Rohan both gave talks. Rohan co-authored a poster in July 2008 at the Marine Science Conference, New Zealand, and is planning to give a talk at the Palmerston North Stats Forum in October.

Back at DOC, training is the major theme in the spring, before staff become thoroughly absorbed by the new field season. Richard Barker came to give an introductory course for DOC scientists on mark/recapture methods in Hamilton at the end of August; Ian and/or Rohan will be teaching internal courses on statistical modelling using R, and a follow-on module on longitudinal data using mixed models. Plus we plan to trial a workshop on graphing in R using Lattice (using Sarkar's excellent new book) and pilot a course on population modelling. Ian will be giving a few lectures at Canterbury University for Jennifer Brown, flowing from his new appointment as an adjunct fellow.

Ian Westbrooke

Statistics New Zealand

As is usual for our report we start with the arrivals and departures from Statistical Methods. Arrivals include Lee-Kurt Kupferman, Olena Rodnyanskiy, Tim Hawkes, Joanne Ang, Hazel Kale and Lyndon Ang. We also welcomed Robert Poole who is on secondment from the Australian Bureau of Statistics (ABS). We are currently recruiting and you will find out who were successful in our next report. We farewelled a number of people including Nellie Yang, Kee Chang, and Lisa Henley. John Pearson went from being in Statistical Methods to a Senior Research Statistician in Statistics New Zealand (along with Christine Bycroft and John Bryant) then later left Statistics New Zealand to be a senior lecturer in biostatistics at the Christchurch School of Medicine at Otago University. Soon Song has recently been seconded to MSD for a year.

Many of us have presented papers at various conferences: Mike Doherty, Walter Davis, Frances Krsinich, Mike Camden, Tim Hawkes, Lee Kupferman, Grace Chiang, Chang Li, Victoria Wei and Olivia Son all presented at the recent NZSA conference. John Créquer and Guan Yu (Fish) Zheng were part of the strong Statistics New Zealand presence at the NZ Association of Economists Conference in Wellington in July. Paul Cowie, Angela Forbes, Barbara Clendon and Walter Davis went to the Australian Statistical Conference in Melbourne at the start of July with Barbara also attending OZCOTS as well as visiting the ABS. Mike Camden went to the UNECE/ Eurostat conference on confidentiality and visited the ONS, and has also recently returned from Western Australia (at their invitation) where he talked about statistics education in New Zealand. By all accounts the Australians are envious of what's being done in New Zealand. Vera Costa went to 2008 UNECE Conference on editing and imputation in April and

May this year where she was on the programme committee as well as presenting 3 papers on our behalf. While in Europe Vera visited Statistics Sweden, Statistics Finland and the US Census Bureau, finally dropping in on her son at Berkeley before she returned.

In March, Ray Chambers from Australia visited our offices and gave seminars on "Measurement Error in Auxiliary Information" and "Analysis of Probability-Linked Data" in Christchurch and Auckland (via video link) and "Robust Prediction of Small Areas Means and Distributions" and "Estimation of the Finite Population Distribution Function" in Wellington. Many took the opportunity to hear him give the NZSA Lectures at their local universities. While Ray was here we discussed many other survey design and estimation problems of mutual interest. We also had Nick Horton give a seminar "Much ado about nothing: a review of the state of the art of incomplete data" to all three offices via video link while he was visiting the University of Auckland.

Statistical Methods had their annual Professional Development Off-site (PDO) in March where a range of topics were covered, as well as giving the people from Auckland, Wellington and Christchurch a chance to attach names to faces during the various social activities that are the normal part of PDO.

We also would like to remind people that Statistics New Zealand has a series of Official Statistics System (OSS) seminars, mainly in Wellington but there are some in Auckland as well. For details see OSS Seminar Series page. The OSResearch projects for 2008/09 have been approved and cover a range of topics. A call for proposals for 2009/10 will be made in November 2008. For details on the 2008/09 projects or how to submit for 2009/10 see the OSResearch web site http://www.statisphere.govt.nz/official-statistics-research/default.htm.

Richard Penny & Olivia Son

University of Waikato

The Department of Statistics at Waikato University is still currently short staffed. We are seeking to fill two positions, one at the Professorial level and one at Senior Lecturer/Lecturer level. We had made an appointment at the lecturer level, and the successful applicant was due to take up the appointment in August 2008. However, in the end, the appointment was not taken up and this has left us in a difficult position in meeting our teaching commitments for the rest of the year. As well as this, David Whitaker retired at the end of the first semester. He and his

wife have moved to Naseby, in Central Otago. We do wish him well in his retirement. Another change of staff has seen us farewell our departmental secretary, Rhonda Robertson. We welcome her replacement, Tania Robinson.

Despite the staffing problems, some departmental members have managed to attend some overseas events. Lyn Hunt was an invited participant at HDM2008, (The International Conference on Multivariate Statistical Modelling & High Dimensional Data Mining) held in Kayseri, Turkey, 19-23 June 2008. She gave a paper entitled "Model Selection Using the Multimix Class of Mixture Models". Murray Jorgensen attended IBC 2008, the XXIVth International Biometrics Conference held in Dublin, 13 - 18 July. At the conference he gave a paper entitled "Forming Clusters from Census Areas with Similar Tabular Statistics" and also presented a poster entitled "Latent Variable Models for Dilution Series". Bill Bolstad attended ISBA 2008, the 9th World Conference of the International Society for Bayesian Analysis. At this meeting, he presented a poster entitled "Teaching Bayesian Statistics: What works and what does not".

Early this month, we had the pleasure of hosting the 59th Annual Conference of the New Zealand Statistical Association. This was a very successful 2-day conference, with a keynote address from Professor Charmaine Dean from Simon Fraser University, Vancouver, Canada on the first day, and a Statistics Education day with the keynote talk from Dr Sharleen Forbes of Statistics NZ and the School of Government at Victoria University on the second day. This day was also attended by more than 30 secondary school teachers from the Waikato, Bay of Plenty and Auckland regions. A full report of the conference is given on page 1.

Recent Seminars in the Department:

David Scott (University Of Auckland) "The Hyperbolic And Related Distributions" March 3

Ray Chambers - NZSA Visiting Lecturer - (University of Wollongong) "Maximum Likelihood under Informative Sampling" April 14

Rosemary Bailey (Queen Mary College, University of London) "Experiments in Rectangular Areas: Restricted Randomization of Row-Column Designs" April 21

Nicholas J. Horton (Smiths College and University Of Auckland) "Much Ado About Nothing: A Review of the State of the Art of Incomplete Data" May 5

Judi McWhirter

University of Canterbury

The statistics group is very pleased to have recently hosted Ronald Christensen as an Erskine Fellow for 3 months. Ron provided many contributions to our teaching programme, including teaching our new Stage 3 GLM course. Ron also providing a very stimulating reading group on Bayesian non-parametrics, including Polya Trees and Dirichlet Processes.

Jennifer Brown, along with PhD students Miriam Hodge and Meghan Williams, attended the International Statistical Ecology Conference at the University of St Andrews, July 9 - 11, and then the International Biometric Conference at University College Dublin, July 13 - 18. They presented papers on uncertainty analysis and on spatially balanced grid sampling.

Timothy Robinson, from University of Wyoming, has just left after a 6 month visit. Timothy co-taught one of our data analysis courses, offered a lot of excellent advice to the environmental statistics graduate students and worked with Ian Westbrooke (DoC) on analysis of bird trend data. Jennifer will be visiting Wyoming in 2009 to carry on work with Timothy on analysis of trends with non-normal data.

Marco and Carl attended the Computational and Financial Econometrics Conference, Switzerland, presenting papers on a test for H-similarity and extreme value mixture models respectively. They were also pleased to meet up with a previous honours student Alethea Rea at the conference, who was presenting their joint work on graphical models of multivariate volatility. Alethea is now enjoying working on her PhD with David Bryant.

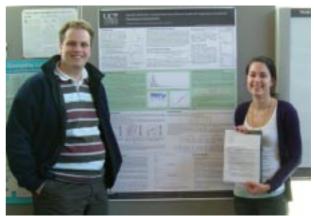
Carl and Dominic's new PhD student Anna MacDonald, has had an excellent start to her research. Anna has been awarded a prestigious Top Achiever Scholarship to examine extreme value modelling with application to neonatal physiological measurements, jointly with clinicians Dr Glynn Russell and Dr Brian Darlow. Anna presented her initial research at the Australian Statistics Conference (ASC2008) and won the second poster prize (see photo right). Well done Anna, and keep it up!

Dominic's PhD student, Marina Zahari, presented their paper entitled "Quantifying blood oxygen levels in preterm infants using coefficient of variation" at the ASC2008.

Carl was pleased to be nominated for UCSA Lecturer of the Year, voted for (very unscientifically!) by students.

Raaz Sainudiin has been settling down into life here at Canterbury. Raaz recently visited colleagues in the Bioinformatics Institute, Auckland to give a talk entitled "Six Resolutions of the n-coalescent" and gave a talk entitled "Kingman's unlabeled n-coalescent" at the very enjoyable 7th World Congress in Probability and Statistics, Singapore, 14-19 July.

Carl Scarrott



Carl and Anna with her Top Achiever Letter, in front of her prize winning ASC poster.

AgResearch

Our group meeting (including bioinformaticians and mathematicians) was held at Invermay in March, a change from the traditional format at Ruakura. Our taste of local culture took us on a visit to the Speights Brewery and dinner at the Ale House.

At the end of June Dave Saville resigned from AgResearch to set up his own consultancy. He was farewelled in style and has since been presenting courses on statistical methods at various venues around the country.

Zaneta Park attended the R workshop in Melbourne, and returned full of enthusiasm for its potential; she also went to the International Meeting of the Microarray and Gene Expression Data Society at Riva del Garda, Italy, where she presented two posters.

AgResearch made a substantial contribution to this year's NZSA conference, with Harold Henderson, Catherine Cameron and Roger Littlejohn involved in organisation and Ken Dodds giving an invited talk in the Statistical Genetics theme.

In a new initiative this year, AgResearch has hosted two European interns on six month placements as part of their degrees. Dorothee Ball, a student of Markus Neuhauser in Remagen, worked with Roger Littlejohn on "Utilising DNA-based breed composition estimates to improve accuracy of breeding value estimates in red deer" and Yann Poulouin worked with Neil Cox on "Heat stress in cattle".

Roger Litlejohn

Massey University, Turitea

Jonathan Godfrey went to the Australian Stats Association Conference ASC2008 in Melbourne and gave two talks: "A Quality Control Analysis for the Volatility of Stock Returns" and "What do we really know about Pearson's correlation coefficient?"

Doug Stirling gave an invited talk at OZCOTS in Melbourne on recent additions to CAST. He is currently writing exercises to accompany the CAST modules. Doug also visited Uganda and Ethiopia to talk to the UN Economic Commission for Africa about an Official Statistics e-book in CAST. (The vaccinations for this trip cost about \$500.)

Ganesh attended both OZCOTS and ASC2008, giving talks at both. He also visited Denny Meyer at Swinburne University of Technology. After a few weeks back in Palmy, Ganesh returned to Australia as a tourist, cruising the Murray River for a week.



Ganesh (just visible) on a boat on the Murray River

Steve Haslett had two weeks in Cambodia in April, working on a poverty estimation project for the UN World Food Programme. He then spent some sabbatical time in Finland, visiting Simo Puntanen at the University of Tampere, before heading off to the International Workshop in Matrices and Statistics in Portugal.

Geoff Jones attended the IBS conference in Dublin in July and the JSM in Chicago in August, spending the two intervening weeks working with Wes Johnson in California. The round trip involved a total of 12 flights, every one of which went wrong in one way or another: delays, cancellation, lost luggage. The highlight was an "upgrade" on a Sacramento to Denver flight, from Economy Class to a seat that didn't exist.

Ganesalingam and Alasdair Noble are organizing another Palmy Stats Day for 24th October - see advert on page three.

Four of the Turitea statisticians, Martin Hazelton, Greg Arnold, Ganesalingam and Steve Haslett, made the trek up to Hamilton for the NZSA conference.

Congratulations to graduate students Tilman Davis and Brigid Betz-Stablein who have both won scholarships: Tilman a New Zealand Top Achievers Scholarship and Brigid a Massey University Doctoral Scholarship. They will be returning later this year from Washington DC, where they have been working at a biostatistical consulting firm, to begin a PhD (one each, we assume) under the supervision of Martin Hazelton.

Several of us were involved again this year in judging Science Fairs. Steve Haslett, Alasdair Noble and graduate students Ting Wang and Maris Isidro took on the Palmerston North competition, while Geoff Jones and Raj took on the torrential rain in driving to Masterton for the Wairarapa version.

We have solved the problem of having the Stats Office closed every afternoon: a new administrative assistant, Colleen Manson, is now staffing the office in the afternoons. To compensate for this good fortune the office is now closed in the mornings.

Geoff Jones

And Finally ...

I was interested to read, in reports of the International Society for Bayesian Analysis conference in Hamilton Island, Australia, that a regular feature of the ISBA is a cabaret where the words of popular songs are modified to incorporate references to Bayesian methods.

Fancying myself as something of a poet, and having this awkward space to fill at the end of the newsletter, I couldn't resist having a go myself. So I hope you'll all sing along with me now to:

Those Were the Days (with apologies to Mary Hopkin)

Once upon a time I had some data From which I had to calculate the mean; I'd punch some buttons on my calculator And up would come the answer – quick and clean.

But now my friends I'm older and much wiser For I have my Statistics PhD, So first I must elicitate a prior Then bung the whole thing through MCMC:

Chorus:

I'm using Bayes, my friends!
Those chains - they never end,
They seem to take forever and a day;
I'm so superior with my posterior:
I'm using Bayes! Oh yes, I'm using Bayes!

Geoff Jones

Explore your data quickly with STATISTICA



This page displays four menu options in STATISTICA showcasing the vast range of statistical functions that can be performed. Contact HRS today if you wish to try out any of these functions on your data or to find out what other features are available.



Generalised Linear / Non-linear Models

Hypothesise, test and find relationships in your data with generalised linear and non-linear modelling. Perform quick or advanced tests using ANOVA, and plot your distributions. Perform single, multiple or factorial regression analysis. What ever your general statistics needs, STATISTICA has the tools for you.

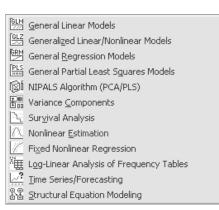
Multivariate Exploratory Techniques

STATISTICA provides a broad selection of exploratory techniques for various types of data, with extensive, interactive visualisation tools.

	Cluster Analysis
3	🔆 Eactor Analysis
	Principal Components & Classification Analysis
2	🔭 Canonical Analysis
120	Reliability/Item Analysis
1	
E	X Correspondence Analysis
	₩ Multidimensional Scaling
	Discriminant Analysis
	GDA General Discriminant Analysis Models

Advanced Linear & Nonlinear Models

STATISTICA provides a wide array of the most advanced modelling and forecasting tools on the market, including automatic model selection facilities and extensive. interactive visualisation tools.



Data Miner

The data mining option has a comprehensive selection of data mining solutions with an icon-based, extremely easy-to-use user interface. It features a selection of completely integrated, and automated, ready to deploy "as is" (but also easily customisable) systems of specific data mining solutions for a wide variety of business applications.

STATISTICA Data Miner is the ideal tool for uncovering hidden trends. explaining known patterns and predicting the future.

DRILL	Data Miner - General Slicer/Dicer Explorer with Drill-Down
Ñ	Data Miner - General Classifier (Trees and Clusters)
777	Data Miner - General Modeler and Multivariate Explorer
2/2	Data Miner - General <u>F</u> orecaster
P::	Data Miner - General <u>N</u> eural Network Explorer
Ė	Neural Networks
姬	Independent Components Analysis
36	Generalized EM & k-Means Cluster Analysis
×	Association Rules
Δ	General Classification/Regression <u>T</u> ree Models
Ω	General CHAID Models
γχ	Interactive Trees (C&RT, CHAID)
Q.B	Boosted Tree Classif and Regression
8	Random Forests for R
AM AM	Generalized Additive M
AR 5	MARSplines (Multivariate and Multivariate and
8	Generalized Additive M MARSglines (Multivariath Machine Learn Machine Le
Z	Rapid Deployment STATISTIFREE
82 II 5	Goodness of Fit, Clas
12	Rapid Deployment Start Four Frage Selection Combining Group Combining
∄-A	Combining Group

5 Ways to obtain your FREE STATISTICA INFO KIT:

- **1. Call** 0800 477 776 or 07 839 9102 **2. Mail back** a copy of the form below completed
- 3. Email 2112@hrs.co.nz

4. Fax the card to 07 839 9103

5. Visit www.hrs.co.nz/2112.aspx Note: Please quote lead

reference 2112 when contacting us for your info pack.

Contact Details	
-----------------	--

Name: Position: Department: Organisation: Address 1: Address 2: City:_____ Phone: Fax:_____ Email: Your industry:____ Your particular interest:_____

Yes - Please send me a FREE Info Kit that includes:

STATISTICA Info

☐ The HRS Software Guide!



