Australasian Region
Newsletter
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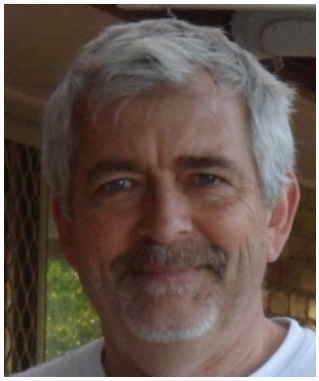
## From the President's desk, Ross Darnell (Ross.Darnell@csiro.au)



This is my first contribution to this newsletter. I would like to thank David Baird for his presidency over the last two years.

I guess some of you might be interested in my "qualifications". My first degree was a BAppSc in rural technology from Gatton College. I became interested in the biometrics courses and realised that conclusions from agricultural experiments were very dependent on the statistical ability of the researcher. This still seems to be the case. So I headed off to Sydney University to get a PG Diploma in Biometry. My first job was as a biometrician with the NSW Dept of Agriculture alongside current members Arthur Gilmour and Brian Cullis. I enrolled as an "internal remote" student in an MSc at UNE in the late 80's while I was working at Grafton in northern NSW. The thesis title was "The analysis of repeated measures using Kalman filter" and I remember presenting a talk at the regional Biometric conference in Adelaide on this and feeling very nervous. After 13 years in the NSW Dept of Ag I took up a job as lecturer at QUT in 1992, followed by a short stint at Qld Rail, and USQ in Toowoomba. Then in late 1997 I grabbed an opportunity to start a PhD part time, keep a family and work in the UK to allow my family to experience life in Europe. I was a consulting statistician at the University of Newcastle-upon-Tyne while I completed a PhD under Murray Aitkin. The title of my PhD was "General and approximate methods of maximum likelihood estimation with missing covariates in linear models". I returned to Australia to take up a job at University of Queensland in the School of Health and Rehabilitation Sciences in 2002. I moved to CSIRO in 2008 and have been there since. I started at CSIRO initially working with problems in ecological biodiversity but have shifted recently more to my roots as most of my work now is related to agricultural science. One of the more interesting projects I am involved currently is based in eastern sub-Saharan Africa which does mean frequent travelling.

I have attended many of the IBCs (Dublin, Cairns, Kobe and Florence) and a couple of the local regional ones. Mostly the IBCs have been enjoyable but the Australasian Regional conferences are always great to attend. I am sure the next regional conference in Hobart (see below for more information) will be a great conference to attend.

I am looking forward to the next two years in the role of president and I am always eager to help develop any new initiatives and opportunities from our members. The Society is what we make of it but most of us are busy with our day jobs. My thinking is that a little effort by lots of people is much better than the alternative. I'm an optimist.

**Ross Darnell**

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## Australasian Region - Council

In 2015, the regional council comprises:

**President**: Ross Darnell (CSIRO)
**Past-president**: David Baird (VSN NZ)
**Secretary**: Katya Ruggiero (University of Auckland)
**Treasurer**: Warren Müller (Retired)
**Newsletter correspondent**: Vanessa Cave (AgResearch)
**Regional website manager**: Hans Hockey (Biometrics Matters)
**IBS Executive Board**: Alan Welsh (Australian National University)
Kerrie Mengersen (Queensland University of Technology)
**IBS Representative Council Members**: David Baird (VSN NZ)
Ken Russell (Charles Sturt University)
Katya Ruggiero (University of Auckland)

## Upcoming Conferences

### Australasian Biometrics Conference

The next IBS-AR conference is being held in Tasmania, 30 November-3 December 2015. Details will be posted at: http://www.BiometricSociety.org.au

### International Biometrics Conference

The next IBC will be held in Victoria, British Columbia, Canada, 10-15 July 2016.

### ISI2015 World Statistics Congress

Rio de Janeiro Brazil, 26–31 July 2015, http://www.isi2015.org/

## Biometrics by the Harbour


**Biometrics by the Harbour**
**Hobart, Tasmania**
**30th November – 3rd December 2015**

**Save the Date**: On behalf of the Australasian Region of the International Biometric Society we invite you to join us for our biennial conference. Share your work with colleagues working with statistical tools on problems in the biosciences, including ecology, agriculture, biomedical science, public health, environmental science and forestry.

The conference will be held at one of Hobart's oldest hotels – Hadleys Hotel (http://hadleyshotel.com.au), located in the heart of Hobart. Hobart itself is well known for its history, its natural beauty, its food and culture, and as a gateway to pristine wilderness.

Come and enjoy a world-class conference in a stimulating environment!

Details will be posted at: http://www.BiometricSociety.org.au

### Travel Awards to Assist IBS Members from Developing Countries

The IBS Awards Fund Committee has instituted a program to assist IBS members from developing countries to attend conferences sponsored by IBS Regions or Networks, such as Biometrics by the Harbour.

For more information, please visit: http://www.biometricsociety.org/travel-grant-application/

## Shirley Pledger: NZSA Campbell Award

At the New Zealand Statistical Association Conference in Wellington in 2014, Professor Shirley Pledger from Victoria University of Wellington received the Campbell Award—the NZSA's highest accolade—for her sustained contribution to the promotion and development of statistics. Shirley started out in mathematics, and after a few years at home with family moved into statistics. She has been a member of IBS since 1982 and was an associate editor of Biometrics during 2001-2003. Her research work is in capture-recapture models and, more recently, in modelling ecological communities using finite mixtures. She retired recently, but continues at Victoria University, doing research and supervision and drinking tea with colleagues.

## Scholarships for Honours and Masters Students

The Australasian Region of the International Biometric Society wants to attract enthusiastic and talented graduates, or near graduates, in statistics, mathematical statistics, biostatistics, bioinformatics or biometrics, to career paths in biostatistics and biometrics. The society is offering scholarships for suitably qualified students who intend to undertake a fourth or honours year of study, or a Masters degree, in statistics, mathematical statistics, biostatistics, bioinformatics or biometrics.

Scholarships are for one year and are valued at AUD1500. Applicants should have completed a third year of a relevant bachelors degree course, or equivalent, with a major in statistics, mathematical statistics, biostatistics, bioinformatics or biometrics, and must have a strong academic record, potential for a career in research, a strong interest in applications of mathematics and statistics to the biosciences, and good communication skills.

Please note that the closing date for applications is **Monday 2 March 2015**. For further information, including application forms, please see the IBS Australasian Region website: http://www.biometricsociety.org.au/studentprizes.html

## Experiences from AASC

My memory may fail me but I think the AASC 2014 held at Port Lincoln in December 2014 was the first Australian Applied Statistical Conference I have ever attended. I decided to cancel the 40 minute flight from Adelaide to Port Lincoln to hitch a lift with Olena Kravchuk, co-chair of the organizing committee. The 7 hour drive was great for me as I have never travelled to places like Tumby Bay, Cowell and Whyalla before.

Before 2011 the AASC was the Australasian Genstat Conference reflecting its strong support from GenStat and now ASREML users. This year the conference ran from the 1st - 5th December.
The venue was the Port Lincoln Hotel sited close to the shoreline of Boston Bay. The organising committee should be congratulated on their choice of location and venue. Port Lincoln is a small city but large enough to have a choice of good restaurants and cafes to socialise with friends.

Plenary speakers included Prof Peter Diggle, Prof Brian Cullis and Prof Roger Payne.The program was not all things agriculture, GenStat or ASREML as you can deduce from Prof Diggle's inclusion. Around 80 people attended the conference and only one session ran at any one time, so you got to meet most of the participants by the end of the week. There was a day of conference workshops that were held concurrently. David Baird and I delivered one workshop on graphics (David taking the case for GenStat and I for R) while Sue Welham and Roger Payne ran another on GenStat and Jennifer Brown and Melissa Dobbie led another on survey methodology. **Ross Darnell**

## Joint NZSA+ORSNZ Conference

Peter Green (plenary speaker) and John Haywood (Chair of the organising committee)

The complementary and overlapping research interests of the New Zealand Statistical Association (NZSA) and the Operations Research Society of New Zealand (ORSNZ) have recently encouraged (very successful) joint conferences between the two societies. The 2014 joint conference, hosted by Victoria University of Wellington, attracted over 180 delegates and covered all practical and theoretical aspects of statistics and operations research. Plenary talks were given by Geoff McLachlan (University of Queensland), Chid Apte (IBM Thomas J. Watson Research Center, New York ), Peter Green (University of Technology, Sydney and University of Bristol), Miguel Anjos (Trottier Energy Institute, Polytechnique Montreal) and Alan Brookhart (University of North Carolina).

A highlight of the conference was the presentation of the NZSA research awards at the conference dinner. The Worsley Early Career Research Award was presented to Tilman Davies (University of Otago) in recognition of his expertise in spatial processes and flair for collaboration. The Littlejohn Research Award, which celebrates excellence in research based on publications during the last five calendar years, was awarded to Martin Hazelton (Massey University) for his internationally recognized theoretical contributions to density estimation, nonparametric regression and traffic modelling. Shirley Pledger (Victoria University of Wellington) received NZSA's most prestigious award, the Campbell Award, for her remarkable and ongoing contribution to the modelling of heterogeneity in both closed and open populations, and on modelling the age structure within open populations, including application to migratory bird movements. Shirley's leadership in scholarship was also noted, particularly in mentoring and encouraging young researchers to publish and to further their academic careers.

We congratulate Neil Cox (AgResearch), Jennifer Brown (University of Canterbury), David Scott (University of Auckland) and Stephen Haslett (Massey University) who were awarded Honorary Life Membership. We also congratulate the winners of the NZSA best student presentation prizes (sponsored by Harmonic Analytics): Daniel Fernandez and Alison Sefton (1=), Zoe Williams (Runner Up), and Roy Costilla (Best Poster).

For more information, including links to the Conference Proceedings, visit the conference website: https://secure.orsnz.org.nz/conf48/.

Photos from the conference are available at:
https://www.flickr.com/photos/111101747@N06/sets/72157649504403986/.

## Is there Somethng Significant going on in the Auckland University Statistics Group?

In the last few New Zealand Statistical Association (http://www.stats.org.nz/) newsletters, much commentary was made about an unusual sex ratio among offspring produced by members of the University of Auckland Statistics department. This was based upon the observation of the erstwhile newsletter correspondent that a very large number of baby boys had been born to department members over the past decade, seemingly unaccompanied by corresponding numbers of baby girls. Many impressive p-values were quoted, growing tinier and tinier by the newsletter.

It should now be mentioned that these figures were based on some questionable survey protocol. Specifically, the correspondent (who shall remain anonymous) employed a technique known as *anecdotal recall* for data collection, and assimilated results on the back of an envelope. Occasionally, data points were verified by cross-checking with the anecdotal recall of other randomly-selected department members, with reckless disregard for correlated errors in the resolute quest for statistical significance.

Finally, in January 2014, the Head of Department demanded that the study be placed on a firmer scientific footing. A census was carried out of all staff and PhD students housed in the department since 2000, with regards to their known or suspected offspring. Only offspring thought to have been conceived during the parent's time in the department were counted. Non-response error was near eliminated by an aggressive follow-up strategy, and forgetfulness was mitigated by consultation with family members. The survey was conducted with blinding, in the sense that nobody had a clue why the correspondent was asking these questions.

As a result, a complete record of departmental offspring since 2000 was compiled. Intriguingly, the study uncovered a number of hitherto unknown baby girls, while some baby boys were expunged from the record. These errors were attributable to confusion in the anecdotal record over the dates, sex, and existence of some offspring. The grand total was 36 offspring since 2000, comprising 25 boys and 11 girls, yielding an only-slightly-impressive p-value of 0.03 against the null hypothesis of equal chance. However, in a much more impressive statistical twist, we noted that a total of 14 births occurred between 2004 and 2010: all of them boys! Seen in the context of all 36 births, the chance under an equal sex ratio of having an unbroken run of 14 of either sex is only 0.0015. With honour and p-value (nearly) restored, we are proud to conclude that there does indeed exist a hypothesis test with respect to which the statistics group at Auckland is statistically significant.

**Rachel Fewster**