

newsletter

ICOTS 3 a Success

After four years of preparation ICOTS3 came of age at Otago in August. There were 564 registered participants, plus at least 120 accompanying adults and children. Some 56% of the participants were from overseas. The organisation of the conference was flawless and the local organising committee can pat themselves on the back for a job well done.

The conference began with a reception on Sunday night before the serious work began. This was an enjoyable mixer and provided a relaxed atmosphere for making new friends and meeting old colleagues. All the participants were welcomed the following morning by the Assistant Vice-Chancellor for Sciences, Don McGregor, and the Mayor of Dunedin, Richard Walls. The Government Statistician, Steve Kuzmichich, opened the conference. Work began right away with an inspiring talk by Jeff Jowett. Over the course of the week 268 papers were presented in 38 sessions, 29 of these involving multiple time slots. In addition there were 19 workshops.

Other social events were a visit to a Marae, the conference dinner, afternoon tours, a Maori theme dinner and a play. The conference dinner was especially enjoyable, with a haggis ceremony that included Malcolm Faddy (well known Scotsman) parading around with a bottle of scotch. The haggis was an interesting experiment. The best way of eating it is with your eyes closed and a glass of water nearby.

The NZSA day was also well organised and attended. The standard of the talks was impressive and their content interesting. Toby Lewis' invited talk was extremely funny.

Thanks go to the organisers and participants for making ICOTS 3 such a great conference.



Len Cook training some potential statisticians at a satellite ICOTS venue



Prof Hiroshi Midzono recovers from the ICOTS conference dinner

In this issue:

- pp. 2-3 President's Column
- p.4 George Seber interview
- p.7 Election Night Forecasting
- p.8 A Game of Chance revisited
- pp.10-12 Members' news

President's Column



Jean Thompson

We are into our fifth decade as a professional association. What have we achieved and where are we going?

Coming of Age

I think it is true to say we have really "Come of Age" as a national association over the last few years. We have seen increasing development within our traditional activity areas and broadening into new areas. Of particular note are our Annual Conferences and the areas of Education and Publications.

Improved Communication

Good communication amongst statisticians strengthens our profession. Now that our Annual Conference moves around the country, there are opportunities for more people to be involved. This in turn enhances the conference and we have seen it grow in strength and stature over the last few years.

The conference provides a valuable forum to bring together all the different strands that comprise our wide-ranging subject. This form of communication is absolutely necessary for the growth of statistics, both in its scope and numbers of professionals. There are also other opportunities for good communication which could be developed. We could do more in the area of external communication. The concept of Local Groups has been suggested by the Executive, but as yet these are not well established. If they could become so, they would provide better access to us by other groups such as teachers and access for individuals in the community as well. The SAPQC has languished a bit in the last few years. With increasing use of polls in the media, maybe we should be using this committee more.

Publications

We now have quite an impressive list of publications available and there will be more coming. Quite a few of these target the education sector. This is important business, as today's students are tomorrow's general public. Publications enable understanding of our subject and are part of the process of making us more visible.

Education

Education has always been of concern to Association members. With the Education Committee widening Association activities there are now more opportunities than ever before for the community to make contact with us. I can see scope for real improvement in the general population's appreciation of statistics and statisticians. However, I personally would like to see an acceleration in this process. I think we do not have to wait for the public to find us, we can lead the way! For example, we can take the lead to have statistics more visible at Science Centres or on Science Days.

For those of you who heard me talk at ICOTS 3 you will already know I have a burning desire to see statistics take its place at the centre of all education, alongside reading, so that numeracy skills can become as naturally expected as literacy skills. (Maybe if you didn't hear my talk you would like to read it in the ICOTS 3 proceedings due out in May 1991.) I do not mean traditional, theoretical statistics here, but rather the sensible use of data. I think we, as an Association, can play an active role in raising the level of public awareness that using numerical information sensibly can be extremely valuable. I believe the skills to make sensible use of numerical information will be the key to opportunity in the 21st century. Let me just add here (*sic*), though, that there will continue to be a need for theoretical statistics too so that new developments are available to make jobs simpler or even possible.

The development of both applications and theory is necessary for the profession to continue to live and be useful. We have to see that the right people come through the system for the impor-

tant task of developing the discipline, but this part of statistics is not and will not be statistics for all.

Public Image

In the past we have attracted a rather bad press. I'm sure you too have heard many jokes about statisticians. But probably one of our most damaging images is that we and our subject are perceived as boring. Now that doesn't sit too comfortably with me, so I make it my business to never let such an accusation go unchecked. However, as with most general perceptions there is an element of truth in it.

Our subject is not boring, but sometimes we can and do make it look that way, particularly in the way we teach it. We need to realize that large numbers of people have been turned off statistics in the past. Perhaps it is time to take stock and ask ourselves, can we do better? I am not only thinking of those whose actual job it is to teach, but also those who consult. We can make more creative use of new technology in the way we present results for example.

The presentation of statistical results and statistical ideas has a big impact on the perception of our subject.

Enthusiasm and Creativity

Can we focus our attention more intensely on the need to impart enthusiasm about statistics and its applications? By each and every one of us displaying enthusiasm and being creative in the way we present results, explain theories and outcomes and generally try to demystify the processes, I think we can do a lot to raise the public perception of our profession. The world in the 1990s is full of data and data opportunities just waiting for decent analysis and interpretation. We need to attract more people into statistics to provide this essential service. We also need more statistically literate people to provide the base for the growth in numeracy skills so desperately needed in New Zealand.

I look forward to my term as your President and would welcome your letters with comments on these ideas and any other matters in which you think we should be involved.

Editorial

Firstly we welcome Jean Thompson as the new president of the NZSA. Jean is well known in the statistical community. She has worked hard on the Education Subcommittee and will doubtless place her energy wisely in directing the NZSA over the next two years. Alistair Gray is the new secretary and put his minute-taking skills to the test at the recent AGM. Some members of the NZSA executive left us after sterling service, including Alastair Scott, Sharleen Forbes and Alan Lee. Alastair was the past president, handling NZSA business in his diplomatic way. Sharleen has been a tireless worker, particularly on the Education Subcommittee, where she was heavily involved with the poster competition and children's census for ICOTS 3. A report on these events appears on page 6 and 11.

On the subject of ICOTS, the local organising committee did a marvellous job. It's always generous to list names in case someone is missed out but we'll dare to do it. Thanks go to Bryan Manly, David Vere-Jones, John Rayner and John Harraway.

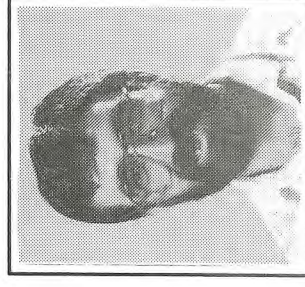
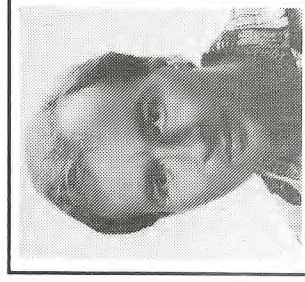
Sharleen Forbes reminded us at the AGM that 1990 is the 150th year since the signing of the Treaty of Waitangi. This makes it an excellent year to encourage more Maori students in statistics.

It's coming up to Christmas again and this is our last issue for 1990. This is a good point to thank all this year's contributors to the *Newsletter*. Without you there would be no *Newsletter* and consequently, no gossip. Please send contributions for the March *Newsletter* to

Peter Danaher
Dept Maths & Stats
University of Auckland
Auckland

Harold Henderson
Statistics
Ruakura Agricultural Centre
Hamilton

Email: Danaher@math.aukuni.ac.nz
HendersonH@Ruakura.maf.govt.nz



An Interview with George Seber

Peter Danaher asks the questions

PD: Tell me about your education background, starting with school.

GS: I went to Mount Albert Grammar School, doing maths/physics/chemistry. I had a good time at school and was probably most known, by the teachers, as the guy who organised the class parties at the end of each term. I also enjoyed table tennis, gymnastics, swimming and soccer, and was involved with youth work at my church and the Y.M.C.A.

PD: You went on to Auckland University from school?

GS: Yes, I did a BSc in maths and physics as well as a theological course by correspondence. I was involved with a lot of things: the academic side was only a part of it.

PD: What about postgraduate work?

GS: I continued on with an MSc in maths at Auckland then got a Commonwealth Scholarship to go to Manchester University where I began my PhD in statistics in 1960.

PD: Who was your advisor and what was your thesis topic?

GS: Firstly I worked with John Darroch then later with David Silvey. Some of my dissertation was on large sample tests and linear models. John Darroch introduced me to a capture-recapture problem which began that work for me. I was also involved in a consulting project to estimate the trout populations in the streams of Lake Windermere.

PD: Did you come straight home after finishing your PhD?

GS: No. I decided it would be a good idea to have some experience teaching statistics before returning to NZ. I tried several places in England and the best offer I got was from Jim Durbin at the London School of Economics. During this time I wrote up some papers from my PhD work and developed a capture-recapture method that gets used quite a lot these days. I also wrote a monograph on linear hypothesis testing.

PD: When did you come back to Auckland?

GS: 1965. We were very short-staffed in statistics and I was dragged into any activity involving the word "statistics".

PD: Didn't you spend some time at Otago University?

GS: Yes. In 1970 I was approached by Otago University to set up a Biometrics Unit to provide a consulting service. I rather cheekily asked if they would make the appointment at professorial level and they agreed! As part of my job I went out looking for work. I got to know lots of people in various departments this way.

PD: Why didn't you stay at Otago?

GS: Auckland was the place where I ultimately wanted to be so I returned in 1973 to be Professor of Statistics in the newly created Statistics Unit. Jeff Hunter was here when I arrived and Alastair Scott had just been appointed.

PD: You've mentioned books already and you're best known for your books. How many have you written?

GS: Six plus a manual on first year statistics.

PD: How do you go about writing a book?

GS: The idea for a book usually sits around in the back of my mind for some time. In the regression book I'd taught linear models for 8 years then had a year off. When I taught it again I reorganised my notes and decided that there's no reason why I can't write a textbook out of this.

There comes a point where I feel I *must* start. Once I begin I tend to go hammer and tongs in a single-minded way. If I'm not careful it can take over my life.

I don't tend to read then write. Instead I write then read, which may sound a bit strange. If I'm interested in a topic I usually know a little bit about it so I write down what I know and proceed from there. If you read other people's material first then you end up writing just a mish-mash of their work. It's important to write something which is your own.

I then do big literature search and put all the articles into envelopes and tackle one envelope at a time.

PD: Do you go through many iterations?

GS: No, I don't rewrite a lot. I generally do one rough draft and after a bit of cutting and pasting I write a final version. I don't believe in mucking about with text.

PD: I think we'll stop there. Thanks very much George.

A Game of Chance Revisited

John Maindonald posed the question *A Game of Chance?* in the last *Newsletter*. I cannot comment on the Gisborne case in which he and Gary Thomas were involved, but I can on the earlier and very similar case in Palmerston North in which Gary and I were involved.

I argued for the prosecution that according to *The Encyclopedia of Statistical Science* a game of chance was one in which any player was neither certain of winning nor certain of loosing. If this was accepted by the court, I next had to show that the chances of winning were not equal for all participants. The argument proceeded along these lines: Suppose there exists a fixed number F of players in a population who would play the game if asked. Suppose at any time x are already participants, leaving $y = F - x$ available to play. It seems reasonable to suppose that the probability of recruitment in a short time Δt is proportional to the expression $(y/F)\Delta t$, and equal to $k(y/F)\Delta t$, where k is a rate of recruitment, of value 2 (at least initially) in this case. The expected number of recruits Δx is therefore $kx(y/F)\Delta t$, which if we let Δt tend to zero leads to the variables separable differential equation

$$Fdx/(x(F-x)) = kdt$$

which can be solved to yield

$$kt = \ln(x/(F-x)) - \ln(x_0/(F-x_0))$$

where x_0 is an initial value. Supposing $F = 30,000$ and $x_0 = .0001F = 3$ to be suitable values for the Manawatu area, and noting that the expected return would appear to be given by $\$750 \times 2 \times 2 = \6000 , we can deduce the following: (a) that the rate of recruitment per member given by $dx/dt/x = k(F-x)/F$ is a rapidly diminishing function and must replace the 2's in the expected return when considering the time dependent nature of the game; (b) that the expected gross return diminishes over time as (0,6000), (1,5987), (2,5903), (3,5329), (4,2743), (5,183), (6,2) and from time period 7 onwards, approximately zero; (c) estimates of the probabilities of winning or losing at any time period can be deduced from these figures. They are demonstrably unequal for

players joining the game at different (and probably unknown) stages of the game.

Gary for the defence argued that while this was all very well, perhaps even elegant, it was utterly irrelevant since the game was NOT a game of chance and therefore NOT covered under the Act. The gist of his argument was as follows: According to Funk and Wagnall's dictionary, a game of chance was one in which, although the outcome was uncertain, it was due to some randomisation or randomised process which was essentially devoid of human influence. Lotto and the Golden Kiwi were called to mind as examples; and the chances of a win or loss could be exactly calculated if the characteristics of the random process were known. The pyramid game on the other hand was one which was heavily dependent on the human element. Probabilities of a win or loss could not be calculated, only estimated. In short it is a game of probability, not a game of chance. Chess was quoted as an example of another game of probability.

The Judge found Gary's argument more persuasive than mine and the defendants were acquitted. Given that the Palmerston North case had then established a legal precedent, it is no surprise that the Gisborne case was decided the same way. However Gary and I both agreed that in reality the game was a confidence trick, and that if you played and lost, it was not to be unexpected.

In the broader legal context these cases and the very recently passed Casino legislation call into question not only the appropriate definition of words like 'chance' and 'random' but also other statistical questions, like quality control. (See Morton, *The NZ Law Journal*, October 1989.)

Hugh Morton

Most-Cited Statistics Paper

Current Contents February 12 and June 25 give the 200 most-cited papers in the *Science Citation Index* between 1945 and 1988. The top statistics paper? D. B. Duncan (1955), Multiple range and multiple F tests. *Biometrics*, 11, 1-42 with almost 9 000 citations.

Statistical Graphics Poster Competition

Our recent nationwide competition to select bright and informative posters using statistical graphics for display at the ICOTS 3 conference in Dunedin in August was a success.

NZAMT (New Zealand Association of Mathematics Teachers) members helped us with the organisation and members of Local Mathematics Associations assisted in the regions by collecting the posters, judging them for Regional Prizes and forwarding them. We were very pleased with the response and we had a large number of posters making a colourful display.

There were many favourable comments made about the posters by the large number of international visitors at the conference. We used a panel of three judges, from Sweden, USA and Pakistan, to select the top three winners and they reported they had a very difficult job as all the posters displayed were good. We were delighted to see a number of Maori language posters and so decided to award a special Te Reo Prize.

The purpose of the competition was in fact more than just brightening our conference venue. We wanted to show our international and local conference participants some of the enthusiasm that exists in our schools for interesting uses of statistics. We also wanted to raise the level of awareness in pupils and teachers alike that involvement with statistics can be fun. This is an important point. There is an increasing need for our young people to feel at ease with numbers and to know how to use data sensibly to aid decision-making. By creating a fun environment in which to explore different uses of numbers, barriers to learning these skills will be eroded. There is also the sense that someone "out there" actually cares about these things. Following that idea, a personal letter of thanks from myself has been sent to every student whose poster was displayed in Dunedin.

The major prize winners were:

First Prize: Melyssa Roy, Correspondence School
Second Prize: Meredith Marra, Samuel Marsden School, Wellington

Third Prize: Marcus Hall and Daniel Low, Napier Boys' High School

Special Te Reo Prize: Matuiatua Kingi and Renata Rogers, Western Heights School, Rotorua
The first, second and third prize winners received cash and HP-21S calculators and certificates. The Te Reo prize was cash and a certificate. The cash was donated by DSIR, Applied Mathematics and the Department of Statistics and the calculators were donated by Hewlett Packard.

Sharleen Forbes travelled out to the backblocks of the Wairarapa to personally present the First Prize. I presented the Second Prize at morning assembly at Samuel Marsden School. I was asked to talk a little about the background of the competition and about statistics. I concentrated on its relevance to today's society and to many of today's problems as this had been the theme of the assembly.

We originally intended that regional competitions would be held for the 15 school regions in the country. These competitions were organized through NZAMT with the local Maths Associations, however not all regions were represented by Maths Associations and not all had the same level of enthusiasm. We have had regional results from Taranaki, Aoraki, Wellington, Hawkes Bay, Manawatu and Waikato. All these prize winners are being sent small cash prizes and certificates.

I think the most pleasing aspect of the Poster Competition has been the very positive feedback we have had from our efforts to ensure everyone involved heard of the results and knew how they had done. This, more than the competition itself, seems to be the thing people are pleased about and now think well of our Association as a result.

Thank you everyone who played a part in what was a pretty mammoth task.

Jean Thompson.

Election Night Forecasting

Phew - Another election is over, my third with TVNZ. In some ways it was different and in others similar to both 1987 and 1984. We had some worrying computer problems, but they didn't spoil my enjoyment of the production. The winner was different to both previous elections, but as usual half the population was delighted, the other half dismayed. The prediction system performed as well as before, but we were unable to make as much use of it as we should have.

The overriding impression, particularly of the early part of the show, was that the results were coming through very slowly. There seem to be two identifiable reasons for this. Firstly, it was my understanding that the returning officers had been instructed not to release any booth data (the most important source of predictive information) until about 25% of the vote had been counted. This appears to be a departure from previous practice, as we had usually been able to get a significant amount of this information into the system in good time. One of the main reasons for selecting booths is of course their smallness so that they count and report early. Secondly, and independent of this delay, the Justice Department were having problems we were told with their computers. Since, for the first time, we were getting a direct electronic feed of this data, it of course never got through to us. In addition to the delay, the indirect effect of all this was that the peak rate of information flow when it comes flooding in from everywhere was that much greater, so causing the response time to, for a while, lengthen significantly, delaying further our ability to get information to air.

On the subject of slowness, let me just enlighten you as to why radio is able to get results to air ahead of us; a question I am often asked. It is not that their system is better than ours, though it is simpler. The reason is technological. We both get the same information from Justice at the same time, but with radio it simply has to be processed through the human brain and read out aloud. (The brain is known to be a fast proces-

sor!) With TV it has to go through several other technological stages, such as the graphics generator, as well as take its turn in the not inconsiderable flow of material to air, not the least of which are 3 minute commercial breaks and interviews with publicity seeking politicians. We were also obviously lagging behind the Labour and National party HQ information machines. Once again the reason is not their better system. It is that their data feed is off "unofficial" vote counts, each obtained from their own party scrutineers. While such data is in all probability correct, TVNZ in presenting an impartial results service, cannot be seen to be collecting and broadcasting results gleaned from partisan sources. We have to wait for each returning officer's decision to release the "official" counts. In some cases the delay is appreciable. As for the predictive performance of the system, I think it did as well as usual. I have not yet viewed the video tapes, so do not have definite evidence of the number right or wrong. I expect to do this reasonably soon and anticipate finding fewer predictions in total, but with an unchanged accuracy of around 90%. I do however clearly remember one result in particular, a prediction for Yaldhurst to stay Labour, a lone pink island in a sea of blue on the battleground screen. It did, but only just. Over the country as a whole, we did have an early indication of the big swing to National, but only on 4 of 5000 booths from 2 of 97 electorates and representing only about 0.07% of the eligible vote. In the light of the poll results of the previous months and even the previous day, I had to resist enormous pressure and not make a premature call on such a small sample.

Nevertheless, the experience was as enjoyable as ever. Very few statisticians have had the experience of real time forecasting and data analysis, with all its own sorts of problems and attractions.

Hugh Morton

See the special issue of the *NZ Statistician* (October 1990) on election forecasting for technical discussion of Hugh's model - Ed.

10th Australian Statistical Conference and Second Pacific Statistical Congress

This combined conference was held at the University of New South Wales from the 2nd to 6th July, with assorted workshops arranged before and after the conference. It was extremely well organised and was well attended with 380 registrants, including a reasonable number of statisticians from industry. It was very pleasing to note a large Kiwi contingent!

Educationally speaking there was quite a lot to take in. My first 'lesson' was finding the invisibility of giving Sydney taxi drivers a \$50 note for a small fare - I received the change all in \$1 and \$2 coins. On a more serious note however, there were many excellent invited talks and keynote addresses, the first of these (Ron Brookmeyer - 'Statistical Modelling of the Aids Epidemic') setting a high standard for the rest of the conference. The other invited addresses were: R. Jarrett - 'The Case for Interaction', G. Box and T. Kramer - 'Statistical Process Control and Automatic Process Control - a Discussion', B. Efron - 'Six Questions Raised by the Bootstrap' (the Sun Microsystems Australia Lecture), H. Follmer - 'Probabilistic Aspects of Option Pricing', A. Smith - 'Sampling and Resampling Techniques in Bayesian (and Likelihood) Inference', A. Mees - 'Nonlinear Dynamical Systems and Statistics', A. Scott - 'Ordinal Regression with Correlated Observations'.

The highlight of the conference, for me, was the R. A. Fisher Centenary set of lectures on the Wednesday evening. These were presented by O. Mayo ('R. A. Fisher's Contribution to Our Understanding of Evolution'), G. Wilkinson ('R. A. Fisher's Contributions to the Foundations of Statistical Inference'), T. Speed ('Randomisation, Replication and Local Control: Fisher on Field Experiments'), and G. Box ('Quality Improvement: An Expanding Domain for the Application of Scientific Method').

The papers presented during the various sessions were generally very good. Even with three sessions running simultaneously talks were often standing room only. The conference also featured book displays by various publishing houses, as well as displays of software.

Overall the conference was most enjoyable, and I will certainly try to make the next one.

John Waller

LAD new release

A new version of the least absolute deviation (LAD) program for PCs by Timo Salmi, Finland, is available by sending a formatted 5.25" disk to Mark Stephens, DSIR, Applied Mathematics, Box 1335, Wellington

Kit Withers

StatLib: A System for Distributing

Statistical Software and Data

StatLib is a mail based retrieval system for statistical software. The collection currently contains about 14 Megabytes of information, including:

A collection of S functions and Fortran and C routines that can be called from S

A partial (but large) collection of algorithms from Applied Statistics

The archives of the S-News mailing list

A collection of Fortran programs for multivariate analysis

A small collection of annotated datasets

A collection of generally useful statistical tools (things like ace, mars, fact, etc.)

The source to the xlipstat computing system and the xgobi data viewer.

A directory of e-mail addresses of statisticians in the UK, Canada, NZ (Yes, our list! - Ed).

In order to get started with StatLib send the one-line email message

send index

to

statlib@lib.stat.cmu.edu

The reply you receive from StatLib should give you enough information to examine the complete StatLib collection.

I encourage submissions! Send me (mikem@temper.stat.cmu.edu) mail for more information.

Michael M. Meyer, Department of Statistics
Carnegie Mellon University

Email address changes

Corrections to the list of Wellington email addresses in the July 1990 *Newsletter* are

Donal Krouse Donal@kea.am.dsir.govt.nz

James Barton BartonJ@mof.govt.nz

Please send additions and changes to the list to HendersonH@ruakura.maf.govt.nz

Statistical Methods for Water Quality Sampling Programmes

Short Course

25-28 February 1991

For information contact

Graham McBride

Water Quality Centre, DSIR

Box 11-115

Hamilton, New Zealand

☎ (071) 567 026 Fax (071) 560 151

Maths Across the Spectrum

NZ Association of Mathematics

Teachers Conference

1-5 September 1991

Victoria University of Wellington

Contributions for papers and workshops are being sought.

For more information write:

Maths Conference

P O Box 11 076

Wellington

Education Committee Activities

The Education Subcommittee is revving back into action after ICOTS, the children's census and the poster competition. Its concerns for the next year include:

Teacher's Day(s), possibly associated with NZSA and/or NZAMT conferences (see conference announcement)

Other input into the NZAMT conference

A possible leaflet on Careers in Statistics

Helping Statistics in New Zealand match the needs of both Treaty-partners

Follow-ups to our involvement in ICOTS

Input to the Form 5 to 7 Maths Syllabus review Responses to the NZ Qualifications Authority requests for input to development of their policies

Responses to the Project ABLE (Assessment for Better Learning) report: "Tomorrow's Standards".

Our last meeting ended in a tumultuous round of applause for Sharleen Forbes. Sharleen was the founding convener of this subcommittee, and her energy and skills have made it very active. Sharleen remains on the subcommittee. We welcome Caroline Smith (Correspondence School) on, and Jean Thompson is our link with the NZSA Executive.

We welcome your comments on these and other educational matters. Write to NZSA, Box 1731, Wellington.

Mike Camden

NZSA 1991 Conference

Our own annual conference will be in Wellington, possibly overlapping with the NZAMT conference. Details will appear in the next *Newsletter*.

Children's Census

On August 1 all primary schools were invited to take part in a Children's Census as part of National Mathematics Week.

The theme of the Census was Health and Awareness and questions were asked about: the children's ethnicity, the language they and their parents spoke at home, the food they ate at school, their transport to school and the speed at which they could skip using a Jump For Heart rope. Finding out the size of animal populations is important in deciding whether they need protection or not. The children were given an exercise to count spiders and many teachers devised ways of doing this which did not interfere with the spiders or their habitat.

Completed forms from more than 600 schools were received. Graphs of national results were produced by David Harte, MAF, and published in Newspapers giving quick feedback.

Schools were also invited to create displays of their own data and a selection of these were shown at ICOTS.

Sharleen Forbes

Members' News

Auckland

Alastair Scott was an invited speaker at the Second Pacific Statistical Congress at the University of New South Wales in July. Chris Triggs, Alan Lee and Craig Ansley also attended and presented papers. Chris spent the previous week working with John Reynolds (Victorian Dept of Agriculture, Melbourne) and Alan the subsequent week working with Nick Fisher (DMS, CSIRO, Sydney). Craig travelled to the Joint Statistical Meetings in Anaheim, California in August. Alastair Scott, George Seber, Alastair McNaughton, Wiremu Solomon and Gary Tee all gave papers at ICOTS. Chris Triggs gave a paper at the New Approaches to Product Development conference at Sydney University in September. Leigh Roberts (Vic) came through on a recruitment drive in early October. Ross Ihaka is back in Auckland working for the Computer Science Dept.

Auckland University is developing the Commonwealth Games site at Tamaki. It will begin in 1991 by teaching just first year Commerce to a cohort of 200 but there are plans to expand Tamaki as a satellite campus. The Mathematics and Statistics Department involvement consists of a Mathematics course and a Statistics course. First year Statistics will also be an option in the Bachelor of Education programme at the Auckland College of Education.

Chris Wild

Congratulations to
Peter Danaher and Felicity Timings
on the birth of their son
on November 12

To quote Peter: "I can't believe how
perfect he is...he looks just like me"

VUW ISOR

A large ISOR contingent attended and enjoyed ICOTS in August. Megan Clark, Brian Dawkins, Stephen Haslett and Leigh Roberts gave talks.

At the NZOR Society Conference in September Doug Harvie and three Masters Students gave papers and John Hurst won the prize for the best student paper.

ISOR looks likely to split from Mathematics and become a department in its own right. We expect to keep the much loved name "ISOR" despite this change in role. Two new courses are being developed, one in sampling and the other in financial mathematics. We now have 11 SUN Sparc Stations. We welcome Lorraine Tuhou, as our new secretary and valuable addition to our volleyball team.

The most striking feature of the last few months has been the proliferation of visitors, many calling in either before or after ICOTS. We have had five medium term visitors all of whom contributed a lot during their stays. These are Manfred Borovcnik (University of Klagenfurt), A V Nagaev (The Institute of Mathematics, Tashkent), Robert Oliver (Berkeley), Simon Peters (European University Institute) and Rolf Turner (University of New Brunswick).

We have also had a flurry of shorter visits and talks given by Malcolm Griffin (Queen's University), David Griffiths, Makio Ishiguro (Institute of Statistical Mathematics, Tokyo), Stuart Klugman (University of Iowa), Dennis Lindley, David Moore (Purdue University - NZMS visiting lecturer), H'Tijms (Vrije University, Amsterdam) and Liang Zhi Shun.
Peter Smith

Christchurch Science Centre

Plans are afoot to convert the extensive Christchurch Railway Station Building into a permanent science centre. With a little bit of luck the first displays will go into action in mid-1991. Statistical ideas are needed! If you have roved the world's science centres and have seen something statistically significant, or if you have an idea you would like immortalised for the edification of future generations, please do drop me a brief description or sketch.
Graham Wood, Dept of Mathematics
University of Canterbury

Dept of Stats: Maths Stats Branch

Minoo Meimand had returned from maternity leave. David Fitzgerald has left for a years' OE. Robert Templeton presented a paper at the International Meeting of Official Statistics in Macau in October and is now on leave for six months, some of which will be spent travelling with David. Helen Scott is spending two weeks during November in PNG assisting with a Post Enumeration Survey of their Population Census, after which she will be leaving our branch for a year to be in charge of running the Household Expenditure and Income Survey: putting theory into practice! With all these departures we have made more appointments from the latest recruiting round: Penny Barber, Rodney Jer, Caroline Kol, Michelle Reyland and Jim Young. Alistair Gray will be attending the International Conference on Measurement Errors in the US in November after Frank Nolan had to pull out after injuring his leg running.

We have ordered a Sun IPC workstation, for which the queue is already forming. This will enable us to link with the email system.

We are working with ISOR on setting up a new course on Survey Design for next year.
Alistair Gray

Waikato and Ruakura

We have enjoyed our share of ICOTS visitors including David Moore, Roland Rust, Simo Puntanen, T. Krishnan, S. Bandyopadhyay and Richard Martin. Flavia Jolliffe continued work with Fay Sharples on the understanding of probability concepts by students at entry to University.

David Griffiths spent an energetic month after ICOTS with us. He gave a seminar on AIDS and was involved in a UQPI seminar to industry. Seminar speakers from NZ have included Judi McWhirter, Gavin Pearce and Peter Johnstone.

Dennis Cook (University of Minnesota) will be visiting for two months from mid February. We are planning a one day workshop in March on "Dynamic Graphical Methods in Linear Models" that he will lead.

Judi McWhirter now has a permanent lectureship. Murray Jorgensen is on sabbatical leave at University of Waterloo for this term. John Turner is due back in January. Nye John and Harold Henderson attended the International Workshop

on Linear Models, Experimental Design and Related Matrix Theory at the University of Tampere, Finland, in August. Janet Zhang, a Masters student is working at Ruakura until the end of the year. Barbara Dow is due to go on maternity leave at the end of this month. The Ruakura contingent report on their exploits at the Budapest IBC on page 12 of the *Newsletter*.
Harold Henderson

Massey

We have had four years of steady growth in student numbers since any increase in staff, but earlier this year the Department was granted three new academic positions. We hope to have a new mathematician, a new statistician and a new operations researcher working in our corridors next year, and working in offices when an extension to our current building is finished in 1992.

Recent visitors include David Moore, David Green, Flavia Jolliffe and Roger Mead. Adding to their seminars a series given by our current Fullbright Visitor, Jerry Spanier, on monte-carlo methods has made the past three months a stimulating time. Jerry Spanier also played a key role in organising a one day seminar where representatives of NZ Aluminium Smelters Ltd, Synthetic Fuels Ltd and MAF presented problems in the expectation that we would find solutions, as if we were not busy enough already. However working on their problems looks much more interesting than the alternative activities available at this time of the year.
Greg Arnold

Canterbury

We enjoyed a stimulating visit by Dennis Lindley who gave a series of five lectures covering topics in Bayesian statistics including multiple comparisons, decision making and personal probabilities. In addition he and I are collaborating on a paper "A new formula for optimal allocation in stratified sampling". Next year we will have Jim Dickey visiting us and we hope one other statistician visiting for up to three months. The department has made a decision to use a position to invite visitors.
John Deely



1992 (XVIth) International Biometric Conference

Hamilton, New Zealand 7-11 December 1992

IBC'92 Secretary
Ruakura Agricultural Centre
Private Bag 3080
Hamilton, New Zealand

Pre July 1991
Phone 64-71-562839
Fax 64-71-385012
E-mail (internet)

Post July 1991
64-7-8562839
64-7-8385012
ibc@ruakura.maf.govt.nz

IBC'92 & NZSA '92 Conference

The 1992 International Biometric Conference and NZSA Conference will be held at the University of Waikato on 7 to 11 December 1992. The programme will be developed over the next two years and details published in the *Biometric Bulletin* and this *Newsletter*. You are encouraged to take part in this conference. We are confident that both the scientific and social programmes will be stimulating and enjoyable.

Programme

The IBC invited papers programme committee is chaired by Jean-Jacques Claustriax, Belgium and the contributed papers programme is chaired by Nye John, Waikato.

Local Organising Committee

The local organising Committee welcome suggestions for the Conference organisation. If you would like to receive further information but do not have ready access to this *Newsletter* or the *Biometric Bulletin* send us your name and address and we will see that you get this information. Better still join the Biometric Society or the NZSA!

Satellite Conferences

A number of satellite conferences are being planned around IBC'92. One is "Statistical Methods in Epidemiology" in Queenstown, 14-15 December 1992. The focus will be on current research in statistical methodology with emphasis on the analysis of dependent data. Katrina Sharples is organising it and welcomes suggestions for speakers and topics.

Katrina Sharples

Department of Preventive and Social Medicine
University of Otago Medical School
Box 913, Dunedin

☎ 64-3-479 7221 Fax 64-3-479 0529
Email Katrina@Otago.ac.nz

Secretary Biometric Society in NZ

Roger Mead, Secretary of the Biometric Society is on sabbatical leave at Otago University from ICOTS until April 1991. Roger is from the University of Reading, Department of Applied Statistics. He is also visiting MAF sites around NZ: Invermay on a weekly basis, Levin for a week in October and Ruakura for the last week in November. The Waikato team will be checking out some of the social venues for IBC'92 with Roger!

IBC 90 in Budapest

The NZ contingent to the IBC in Budapest: Ken Jury, Neil Cox, Dave Johnson, Brian McArdle and Harold Henderson had a most interesting time. With more than 500 registered at Budapest, 14 invited paper sessions, 33 contributed paper sessions and 3 computer and 6 poster sessions the week was full of statistical activity.

A police escorted motorcade of buses took us from the conference centre in the 'heights' of Budapest to the opening session downtown where President Richard Tomassone spoke on the "Future of Biometry" and the R. A. Fisher Centenary was lead by A. W. F. Edwards, with papers on Fisher's contributions to Biometry, Genetics and Agricultural Statistics. A wonderful banquet was enjoyed in a grand building of the University of Economics.

On the last two days of the IBC we set up a NZ booth with scenic videos, kiwifruit tasting and glossy invitations to IBC 92. Ken Jury gave a masterly promotional slide show. The Budapest IBC was truly international and we look forward to seeing a large representation of nations here in 1992 - with of course more from New Zealand and Australia!
Harold Henderson