

# MASSEY



*learning to love  
dandelions*



Getting that strange, intangible, life-altering thing that is a university education is far from easy and involves financial sacrifice. For the full time student it entails three or more years away from the work force incurring debt or, at best, having little or no income, while for the part time extramural student there are other more personal costs such as a continuing drain on what little free time remains to them once family and job commitments are met.



Yet, despite this, people persist in pursuing this goal, and many of them choose Massey. What decides where people study? Matters such as the convenience of access to a particular campus, where friends are studying, and where particular courses of study are taught, but, most of all, we know from our own market research that people want to invest wisely in their future. They want, to put a single much-overused word to it, 'excellence'.

They want high levels of contact with inspiring teachers, and access to well stocked libraries and well equipped laboratories. They want a culture that encourages them to achieve their best. They want professors who are internationally respected. They want qualifications that are valued by future employers, and many may want future postgraduate study.

Similarly, staff want to work with students who are bright and driven, they want the necessary time in which to produce the books and articles on which an academic career is founded, they want access to sometimes costly research equipment, and they want salaries, which, if not internationally competitive, represent some validating acknowledgement of worth.

Excellence, need I say, is also what the Government and our potential research partners want of us.

In many countries the university systems have separated into strata. Among the upper strata are Oxbridge and the so-called ancient universities in the UK, the Ivy League in the US, and the sandstone universities in Australia. All of these, you will notice, have something in common. They are long established.

However, there are also comparatively new universities in these countries that enjoy reputations as good or, in instances, better than those of their more venerable peers. Say Warwick University in the United Kingdom or Stanford in the United States. Students compete for entry to these universities. They have their pick of staff. The quality of their research and their graduates further burnishes their reputations. It is a virtuous cycle. They do well because they are known to be good at what they do.

If we are to acknowledge excellence and be wholehearted in its pursuit, then there will be costs and trade-offs. New Zealand's fastest computer, the Helix computer resident on the Albany campus, may have been built on campus for a shoestring \$250,000, but the Nuclear Magnetic Resonance (NMR) spectrometer that will bolster Massey's pre-eminence in protein chemistry research with its \$3.3 million price tag can only be bought off-the-shelf. In the medium and long term, some such expenditure is necessary expenditure.

As a still relatively new Vice-Chancellor I find myself constantly amazed at how many exceptional people Massey harbours and at the calibre of their work. I want to see that excellence more widely acknowledged and celebrated inside and outside Massey. Because of this, over the next while you will see the announcement of distinguished professors and the creation of scholarships for outstanding students.

Access, relevance and excellence are the trinity of values that define Massey. Access is important. You need look no further than the extramural programme for an expression of the University's long-standing commitment to wide access to tertiary education as a social good. The relevance of Massey's teaching and research is widely acknowledged. However, Massey has been more reticent about excellence, perhaps believing it will be confused with elitism. I think it is time to break silence.

**Judith Kinnear**  
Vice-Chancellor

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## Massey



### Seen the new TV ads yet?

Ian Gilray of Wellington has. In among the montage of photographs, Ian, a Massey MBA graduate, was surprised to see one of his father, who died some years ago, pushing a wheelbarrow and its contents: the then Prime Minister, Michael Joseph Savage.

The photo was taken around 1941 during Savage's first visit to campus, when it was the convention – now sadly neglected – for students to carry distinguished guests from the front gate to the steps of the Main Building. At 6ft 3in, 'Jock' Gilray was a good man to have behind a barrow. He was also no mean student, completing his Diploma in Agriculture with a Gold Medal distinction. It was while at Massey that he met his future wife, Nancye Niccol. Jock and Nancye's grandson (Ian's nephew) Masson Gilray BAgSc is another Massey graduate.

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#### Director of Public Affairs:

DI BILLING: [d.e.billing@massey.ac.nz](mailto:d.e.billing@massey.ac.nz)

#### Editor:

MALCOLM WOOD: [m.wood@massey.ac.nz](mailto:m.wood@massey.ac.nz)

#### Writers and editorial:

DI BILLING, RACHEL DONALD, STEPHANIE GRAY, AMANDA MCAULIFFE, RAY PREBBLE, ALAN SAMSON, JOHN SAUNDERS, HELEN VAUSE, MALCOLM WOOD

#### Photography:

MATT ALEXANDER, LEIGH DOME, JASON DORDAY, JAMES ENSING-TRUSSELL, GRAEME BROWN, JOHN SAUNDERS, DIONNE WARD, DAVID WILTSHIRE

#### The look:

MASSEY magazine was designed by DARRIN SERCI and GRANT BUNYAN, both Massey



Photography lecturer Tony Whincup, whose book *Akekeia!* was reviewed in Issue 13, heads back to the Pacific nation of Kiribati this summer to document traditional canoes and to put in some time sailing his own. The canoe is tacked by carrying the mast and sail from one end of the craft to the other. A skilled sailor can manage this with one hand.

Professor and psychologist Gary Hermansson who valiantly attempted to help MASSEY journalist Di Billing reform her ways in Issue 12 (*Getting with the Programme: A beginner's guide to self renovation*) is off to the Athens Olympics as sport psychologist to the New Zealand Team.





# Why there's nothing wrong with being popular

*At least where the writing of history is concerned*

TELEVISION

If you enjoy both the sweep of history and the detail of human lives then there have been a number of books I can recommend: Dava Sobel's *Longitude*; Simon Winchester's *The Map that Changed the World* and, more recently, Krakatoa; Tim Flannery's *The Future Eaters*; and – the book that has most influenced me recently – Jared Diamond's *Guns Germs and Steel: A Short History of Everybody for the Last 13,000 years*, which seeks to explain human cultural development in pre-agricultural days and explains the post-1500 power imbalances that created our modern world. So much has *Guns Germs and Steel* influenced me that I use it as a text for a history paper I teach called 'A History of the World'.

None of these popular and influential works of history has, so far as I know, been written by historians. Winchester is a geology graduate and a journalist, Flannery a naturalist, Diamond an evolutionary biologist. But for me their works are history at its best, bringing together specialised findings from a range of disciplines, especially the sciences, and fitting them into wider conceptualisations of human development. These were the models I turned to when writing my own work of popular history, *Quest for Origins*.

In *Quest for Origins* I have tried to tell the big story about the human settlement of the Pacific islands, in its own terms, but also in terms of this settlement being the last and greatest of all human terrestrial migrations. It always excites me to think that New Zealand was the very last place of all to be settled by humans. The human journey began in Africa, several million years ago. New Zealand witnessed the end of that journey only 700 years ago. We are truly the last, loneliest place.

As did the authors I admire, I hopped between disciplines, combining the findings of archaeology, linguistics, and physical biology to present them to an intelligent general audience. I tried to locate issues in Pacific prehistory in the context of our own time with its various values and priorities, just as earlier Western theories about Pacific peoples' origins were similarly located in their intellectual milieu.

Why don't we see more works at once highly informed yet at the same time popular and accessible coming from historians working within academia? There are, I think, a number of reasons.

History within our universities has for a very long time been based on the notion that doing any 'bit' of history is as valid as any other, and can be done pretty much independently of other events. So academic historians and their students are encouraged to study whatever aspect of history they chose. That is, of course, how it should be. The prescribing of topics or research projects by institutions or governments would be anathema. Yet one downside of the choose-your-own-topic tradition is that historians have tended

to focus too narrowly on their various interests. A medievalist is not likely to be too concerned with the industrial revolution, just as a feminist historian of Australia is unlikely to study the botanical history of Easter Island. Academic history writing, particularly over the last generation, has been beset with micro-specialisation of research topics, with the results published in a myriad of highly specialist journals.

Then there are the twin waves of postmodernism and postcolonialism. The former, which says that history does not exist, only historians do, is concerned to show not what happened in history, but who writes history and why, and what are the underlying authority structures of such writing. So history is seen to exist only as a 'discursive practice', which requires 'deconstructing'. This approach has led many historians into an intellectual cul de sac and, with its private language, rendered them unable to communicate beyond their tribe. Postcolonialism, for its part, has, at its worst, reduced history to a simplistic morality play where forces of evil (i.e. imperial powers) subdue and victimise weak innocents (i.e. 'indigenous' peoples).

It has not been a part of the historical research tradition for the past 150 or more years to try to see connections throughout human history, or even to make comparisons across time and/or place. There has not been any sustained quest for any possible 'laws' of history as there have in many of the sciences. Historians have not generally been concerned to explain how 'today' has resulted from 5,000, or 50,000 or 5 million years of events. Had Darwin been a historian he would have described the different shapes of finches' beaks on the Galapagos Islands and left it at that. But he had a much bigger agenda, and asked why the differences had come about, and so got an inkling of the idea of natural selection as the driver of biological evolution. Similarly, geologists Hutton and Lyell, had they been historians, might have given a highly detailed account

of the Earth's surface, and then gone on to study something else. But their agenda, like Darwin's, was to explain how the present – in this case the Earth's surface – came into being, and so they worked out basic laws of geology. How do historians explain human cultural evolution from palaeolithic, to neolithic, to modern industrial? Barely at all, which is why I find Diamond's book so exciting, because it offers an explanation for the

modern human condition in terms of the history of humans as a species.

Historians who do not write for their peers are sometimes regarded with suspicion. Any publishing commercial success as a result of writing for a more general audience can intensify the jealousy and/or scorn. A classic case is Canada's Pierre Berton, who has written some runaway best sellers – including my favourite, *Klondike* – yet seems little regarded as a historian in Canada's academe.

Of course you can probably name New Zealand historians who have written popular and influential works of history who prove me wrong: Keith Sinclair, Bill Oliver, James Belich, Michael King. I just wish there were more of them, for they are needed.

As a society we have never been more informed, or more ignorant. When I wrote *Quest for Origins* part of my aim was to dispel some of the more bizarre ideas about ancient advanced societies in New Zealand and Pacific (and indeed world) prehistory. Such fantasies are not just silly, they are pernicious. Anti-intellectualism is on the rise with the wave of 'New Age' ideas. What was once called superstition and irrationality and the fantastic is all ostensibly being normalised. I have tried to do my bit to dispel any nonsense about New Zealand being first settled by Celts, Egyptians or aliens. The real story of Pacific peoples journeying and settling the islands should be more than enough to satisfy anyone's cravings for a fascinating and 'romantic' past.

Historians may interpret and dispute the past, but they seldom invent it from whole cloth. Their works — particularly the popular works — can provide a necessary reality check, particularly at a time when so many of today's debates, be they about GE or the Treaty of Waitangi, are characterised by passion and misinformation.



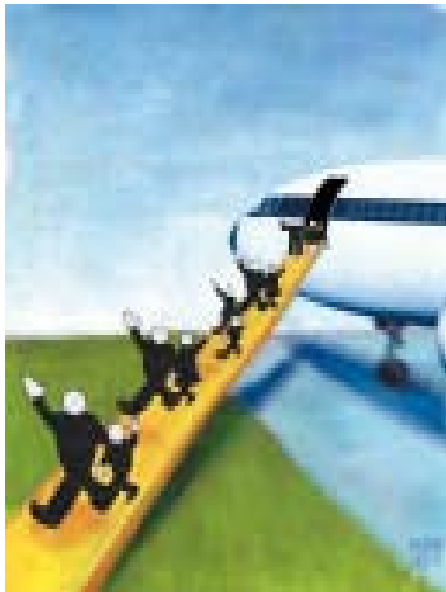
**Professor Kerry Howe is the author of *The Quest for Origins: Who First Discovered and Settled New Zealand and the Pacific Islands*?**

# 'Them' and 'us'

*On immigration and becoming a New Zealander*

Doctors driving taxis, engineers tossing burgers, rising house prices inflated by the demands of new arrivals, unwanted asylum seekers, flashy cars, astronauting parents, young children left alone in New Zealand, crime within the Asian student population, too many students, downturns in student numbers... so the headlines go on, highlighting settlement issues and presenting and building on a negative profile of recent immigrants from non-traditional source countries in New Zealand.

It seems that we want the skills that highly qualified immigrants may bring but we don't really want so many of 'them'; we want international students' money but we didn't foresee or plan for the problems the increased wealth or limited English-language skills might create. We invite them in as permanent residents or students but are very ambivalent about them being here. In an earlier issue of MASSEY, Paul Spoonley addressed the issue of immigration and its importance to New Zealand's future. He noted the disturbing emergence of anti-Asian sentiments, the wastage of immigrants' skills, and the lack of focus on the question of an "appropriate multiculturalism", on what it is to be a New Zealander. These are pressing concerns in a society where at least one in fifteen in the usually resident population identifies as Asian and



international students are predominantly from Asia.

So how did the face of immigration change so drastically in just two decades? The answer lies in the convergence of a combination of factors: immigration policy changes, notably the removal of the traditional source country restriction in 1986 and the introduction of a points system for economic (skilled and business) migrants in 1991; globalisation and restructuring; a growing pool of highly educated professionals – potential skilled migrants – and of those with greater personal

(family) wealth in less-developed countries; the opening up of migration from China and other Asian countries; and the internationalisation and commercialisation of education.

In the early 1990s New Zealand began actively seeking skilled immigrants, competing both with countries that had traditionally encouraged immigration, such as Australia, and with newcomers, such as Germany. There was a rush to recruit talent. The new arrivals would, it was hoped, counter the brain drain of locals to Australia and further afield, revitalise a flagging economy, and give New Zealand a competitive edge. This presumed that their skills would be utilised, their talents tapped. Unfortunately we were not ready to cope with the challenges the new arrivals posed. They have been too different from 'us'. Their lack of New Zealand qualifications and New Zealand work experience, their limited proficiency in English or, indeed, their accents (and the ethnicity and recency of immigration these flag) have precluded them from entry to the professional workforce where they could use their skills.

Entry procedures have been progressively tightened in response to the composition and settlement problems of skilled arrivals. In 1995 an IELTS 5

English-language requirement was instituted. In 2002 this level was raised to IELTS 6.5 (the entry level for most postgraduate courses). And 2003 policy changes mean prospective skilled migrants no longer qualify for immigration if they gain enough points – they will have to register their interest, hope to find a job and wait to be invited to apply for permanent residence – if we want them and their particular skills. This is likely to result in a large fall-off in skilled immigration from Asian countries, even though many bring the electronic/IT experience identified as in demand in New Zealand. At least coming to a prearranged job, where skills are hopefully recognised and utilised, will smooth the settlement process for those who do manage to make it through the selection process, and provide them with an opportunity to be more like 'us'.

International student numbers have also tested an unprepared infrastructure. Language schools have sprouted, institutions have struggled to cope with the numbers and levels of English-language proficiency, and crime has beset our hitherto model minority. Responses have included a requirement that language schools be registered, the introduction of pastoral care requirements, and, when a language school collapsed, damage control by other English-language schools and the Government to protect New Zealand's lucrative \$1.7 billion education industry. The presence of large numbers of Asian students in New Zealand and the fortunes of international education impact on how we see those who are long-term arrivals.

Unfortunately, what policy-making there is in the immigration sector tends to be reactive and piecemeal rather than proactive and planned. The latest changes may, indeed, turn out to be discriminatory. Equal opportunities and social inclusion are central to multiculturalism and a civil society. Where prejudice and discrimination exist there is a need for social policy that supports equal access to opportunities, inter-ethnic contact and shared goals rather than further barriers to entry. While policy outcomes cannot always be predicted even when there is careful planning, their unpredictability is magnified when coherent policy-making is lacking. Thus it is important for not only the economic but also the social goals of immigration policy to be clearly stated and supported by appropriate social policies related to both immigrant settlement and wider ethnic relations. These illustrate a country's response to diversity, affect the socio-economic outcomes of new arrivals and influence mainstream attitudes towards those who are identified as different. Ultimately, they determine whether visibly different immigrants will ever be identified as 'us' or forever remain 'other'.

**Anne Henderson is currently a part-time research officer in a project on the resettlement of skilled migrants in New Zealand, and a full time PhD student investigating the relationships between language policy, immigration policy and language needs for successful resettlement among recently arrived skilled immigrants.**

# Helping out

*Every year New Zealand spends around a quarter of a billion dollars in overseas aid. It needs to be wisely spent.*

## TELEDEBTS

It may seem odd to describe development work as an industry yet, with a government aid budget of nearly a quarter of a billion dollars and a large number of non-government organisations involved in development projects throughout the world, the business of aid is a large one. Although New Zealand devotes a low percentage of its GDP to aid – compared to a number of European countries at least – it is well regarded as a donor, especially in the Asia-Pacific region.

Ten years ago, then Foreign Minister Don McKinnon stated that New Zealand's aid programme brought benefits to this country as well as to the countries we gave aid to. We were "doing well out of our doing good," he said. What he meant was that aid contributes to building peace and security in the Asia-Pacific region, it raises the profile of New Zealand and goodwill towards us and it helps open doors for business. To that list might have been added the high proportion of aid expenditure that returns to this country in the form of payments to development consultants and the fees and living expenses of the large number of aid-funded scholarship students studying here. The country's official development assistance programme (NZODA) was run by a unit within the Ministry of Foreign Affairs and Trade and it seemed to many that aid was driven more by considerations of self-interest and diplomacy than altruism.

Criticisms of the official aid programme mounted during the last decade and culminated in a ministerial review of NZODA. This review, published in 2001, involved a number of sharp criticisms of aid. It was critical of the way the programme had lost sight of what it suggested should be the principal focus of aid: the alleviation and elimination of poverty. It suggested that more funding should go to countries where poverty was greatest, there should be fewer countries as recipients rather than wide dispersal, aid should be focused on things such as primary education rather than tertiary scholarships, and NZODA should be separated from the diplomatic and trade functions of the Ministry through the establishment of an autonomous government aid agency. The review was generally well received and last year in July its recommendations led to the launching of NZAID (the New Zealand Agency for International Development, Nga Hoe Tuputupu-mai-tawhiti).

Already the effects of the reform are apparent. One of the key ingredients of the establishment of the new agency is the move away from diplomatic staff running the aid programme, typically with a short time on the aid desk as part of their career cycle. Now the agency – a semi-autonomous unit still within the Ministry

– is employing development specialists, skilled and experienced in development work and committed to the agency. Its new poverty focus is beginning to shape some new strategies, though it could be argued that 'poverty' can be so broadly defined and analysed that almost any development programme – from global trade liberalisation to village water supply – could be justified under its banner.

Complementing NZAID, the development industry in New Zealand has a large number of development NGOs, ranging from the international agencies such as Oxfam and World Vision to small local voluntary agencies. These organisations, often receiving their funding from NZAID and public donations, tend to work on a different level. They go where NZAID cannot – to Africa, for example, where poverty is greatest – and they tend to operate in ways which build links with local civil society rather than working through cumbersome bureaucracies. Development NGOs in New Zealand add around a further \$60 million in aid to NZAID's \$220 million. This total sum is almost identical to the amount this country receives for its exports in wine!

Despite all this activity and ministerial reviews, there is still a need to question the aid industry. Development projects do not have a happy history and the development literature is littered with stories of failure: inappropriate projects using inappropriate technology without the participation of the supposed beneficiaries and without the long-term commitment of donors. There have been improvements, but sceptics still regard much development work as being driven primarily by the interests of donors rather than by the real needs of recipients. It is an industry that threatens to become self-serving and self-perpetuating. Some also continue to question the very idea of development: is it a force for progress and good or a new means of control, of forcing people into particular ways of life and into a world order dominated by the rich and powerful? Environmentalists also argue that models of development based on increased consumption are simply not sustainable given the planet's limited resources and ability to absorb wastes. The challenge for the discipline of Development Studies is to reassess continually and critically the nature of development as theorised and practised. After decades of trying, one thing we can be sure of is that there are no easy answers and no industry blueprint that will bring development to all.



**Massey University was the first university in New Zealand to offer qualifications in Development Studies and its programme is still the largest. Students can study extramurally or internally for a Postgraduate Diploma, Masters or PhD.**

**John Overton is Professor of Development Studies at Massey and has research interests in rural change and sustainable development. His research has spanned colonial Kenya, rural Fiji and Malaysia.**

## He said, she said, we said

The roles of men and women in New Zealand society have been the focus of the latest International Social Survey Programme (ISSP) conducted by the University's Department of Marketing under the leadership of Professor Phil Gendall.

More than half of the respondents agreed that men should do a larger share of the housework and childcare than they do now, and more than 40 percent believe that both men and women should contribute to the income of a household.

Nearly 70 percent of women believe they do more than their fair share of housework, while only 10 percent of men feel this way. Nonetheless, disagreements about the sharing of the household work are fairly rare: in 75 percent of households such disagreements rarely or ever occur.

Most New Zealanders (76 percent) believe opportunities for university education are no different for men and women. But their views on the opportunities and promotion prospects for women are less sanguine: 40 percent of respondents believe job opportunities are worse than for men with similar education and experience, and 45 percent believe women have worse promotion opportunities. Most of those surveyed (65 percent) believe that, compared with men who have similar education and jobs, women are not paid as well as men. These perceptions were more strongly held by women than by men.

Attitudes towards women and paid work depend critically on whether the woman has children and, if she does, how old they are. Around 40 percent of New Zealanders believe a pre-school child is likely to suffer if his or her mother works and that family life suffers when a woman has a full time job. Thus, while 23 percent of respondents approve of married women working full time before they have children, only 2 percent approve of women with children under school age working full time.

Virtually all (96 percent) believe both parents are equally important to children. However, a large

majority (80 percent) also believe men should be more involved in their children's lives.

Most New Zealanders (66 percent) believe it is all right for a couple to live together without intending to get married. Very few respondents believe that a bad marriage is better than no marriage at all (3 percent). This is reflected in the fact that just under half of those surveyed (48 percent) agreed that divorce is usually the best solution when couples can't seem to work out their marriage problems.

Most New Zealanders believe the law should allow abortion under a range of circumstances.

The survey concludes that the changing roles of men and women in society are reflected in New Zealanders' attitudes towards their roles.

Predictably, attitudes to the roles of men and women in marriage, at home and at work, and towards issues such as abortion, are strongly related to age. Older people

have more conservative, traditional views, younger people have more liberal, modern views and they are retaining these views as they get older. Thus New Zealand society as a whole is becoming more liberal in its attitudes to the roles of men and women, marriage, divorce and abortion. Regardless of age or sex, New Zealanders' concern for the welfare of children is widespread, and expressed in terms of reservations about the desirability of mothers with young children working full time, and support for more involvement by fathers in their children's lives.

The ISSP is a collaborative project involving leading academic institutions in 38 countries in an annual survey of economic and social policy issues. Each year the ISSP carries out identical 30-minute surveys, the data from which is deposited in a central archive and freely available to all ISSP members. In 2002, the 11th year New Zealand has been involved in the ISSP, the topic was the roles of men and women in society, following up a similar survey conducted in 1994.



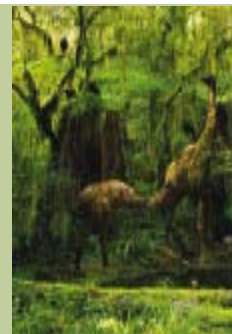
## Sexing the moa

The female of the moa, New Zealand's best-known extinct bird, was much larger than the male. Confirmation of this 'reverse sexual dimorphism' is one of

the results arrived at by a team headed by evolutionary biologist Professor David Lambert. The team may also have erased a species of moa by showing that two supposed species are probably, in fact, the male and female of a single species.

Lambert last appeared in MASSEY with his work on tracking the pace of evolution in penguins. For this he used mitochondrial DNA, which, because each cell contains thousands of mitochondria, is relatively available. For the moa, Lambert again turned to mitochondrial DNA to trace the relationship between species. However, to determine the sex of various moa, Lambert and his team also had to extract and make multiple copies of single-locus nuclear genes from bones that were up to 6,000 years old, a much more technically demanding task. The study has been published in Nature.

Moa, whose living relatives include the emu, ostrich, and kiwi, are likely to have begun to die out with the arrival of humans and rats around 1100 AD. Their bones are found in



## Added value from primary industries

Close to half of New Zealand's food and beverage exports are added-value products, according to a study into the \$16 billion sector conducted by the Institute of Food, Nutrition and Human Health. The research, for New Zealand Trade and Enterprise, is the first to provide an accurate picture of how much export income from primary industries comes from added-value. Research leader Professor Ray Winger says the results show how innovative our primary industries really are: "They're anything but commodity traders."

The study broke down the primary industries into seven sectors: meat, dairy, fruit and vegetable, seafood, cereals, beverage and miscellaneous industries. In percentage terms, 51 percent of the total value of meat exported came from added-value products, 35 percent of dairy goods, 35 percent of fruit and vegetables, 72 percent of seafood, 91 percent of cereal products and 74 percent of other miscellaneous products, such as sugar confectionary, cocoa and chocolate, spices, essential oils, gums and starches, honey, coffee, tea and spices. Beverages were considered 100 percent value-added.

## They sleep better too

Money may not buy you love, but you may sleep better. A newly released study has shown that those who live in deprived areas are more likely to report an insomnia symptom or a chronic sleep problem lasting longer than six months, while the unemployed are more likely to report such things as having difficulty falling asleep, waking more than three times per night or having a chronic sleep problem.

Working at night is likely to predispose you to difficulties falling asleep and chronic sleep problems.

And while some earlier studies have suggested substantial differences between the sexes, the sole difference identified by the study was that while women were more likely to report difficulty getting back to sleep and waking feeling unrefreshed, men were more likely to report waking too early.

Another finding was that around 25 percent of New Zealanders have a chronic sleep problem.

The study was undertaken in 2001 by researchers from Massey University's Sleep/Wake Research





## Lamb for all seasons

Sheep farmers have traditionally sought to raise productivity by having ewes produce more twins and triplets and by working to make sure that the lambs that are born survive. However, there could be another approach: to have more than one lambing per year. This is done internationally, but generally in intensive, inside-wintering systems. Now a research project has been launched to see if year-round lamb production is a viable option in New Zealand.

Project leader Associate Professor Steve Morris, who is leading a team from the Institute of Veterinary, Animal and Biomedical Sciences at Massey University, says increasing production by selecting intensively for fecundity has its problems, such as lower survival rates and the need to find enough feed for lambs and ewes. "Perhaps an alternative is to look at increasing production by lambing more than once a year, rather than producing more lambs per lambing."

Dr Morris says the industry has plateaued at 200 percent lambing with too many triplets potentially resulting in large losses. The many benefits to year-round lambing include an even supply of product to our markets, supply into the off-peak season high-return markets and 'lambs' that are less than six months old rather than up to 14 months old.

"Nine lambings in six years achieving 150 percent lambing rate will produce the same number of lambs as six lambings in six years, but at 225 percent lambing percentage."

However, he notes that while the system could be more profitable, for farmers to adopt it they need to be assured there are premiums available from meat processors to cover the extra costs incurred.

The study is receiving funding from Meat and Wool Innovation, C Alma Baker Trust and the Riverside Research Farm Trust.

## Marsden funding

Scientists from the Allan Wilson Centre for Molecular Evolution and Ecology earned some of the largest 2003 Marsden grants. Evolutionary DNA expert Professor David Lambert will use his team's funding to measure evolutionary rates in vertebrates. Professor David Penny will look at evolution from the late stages of the RNA world through to the emergence of eukaryotes and prokaryotes. The Marsdens will also allow Dr Steven Pascal to investigate the structures and interactions of two key viral molecules and Dr Carol Taylor to continue ground-breaking research into the structure of proteins. Twelve of sixteen Massey submissions for grants were accepted and eight promising young Massey researchers won Fast Start grants. Shown is Professor Lambert with



## Music schools combine

Massey University and Victoria University of Wellington are to combine their strengths to create a new elite School of Music. The school will be in operation for the 2004 academic year, attracting overseas and local students and contributing to the cultural life of the capital. The Wellington City Council and the New Zealand Symphony Orchestra are strong supporters of the proposed school. Shown is classical violinist and postgraduate student with the Conservatorium of Music, Cindy Yan. Cindy is serving as principal first violin with the NGC Wellington Sinfonia.

## Research to uncover Ecstasy use

The Office of the Commissioner of Police has awarded Massey University's Centre for Social and Health Outcomes Research Evaluation (SHORE) \$150,000 to investigate the impact of the increased use of amphetamine-type stimulant (ATS) drugs in New Zealand.

A United Nations report issued by the Vienna-based UN Office on Drugs and Crime cites Australia and New Zealand as second only to Thailand in methamphetamine use. Thailand had a 5.6 percent rate of abuse, Australia 2.9 percent and New Zealand 2.3 percent.

These percentages, based on 2001 figures, are likely to have grown, says Massey researcher Dr Chris Wilkins. Dr Wilkins and his team have produced New Zealand's two national drug surveys. A third is due out early next year.

Dr Wilkins has also been awarded a \$100,000 Fast Start grant to study the level of organised crime in different illicit drug markets in New Zealand to try to determine which illicit drug markets nurture the development of organised crime.

## International enrolments capped

Following a sudden increase in demand for places by international students, enrolments are to be limited from next year. Management processes will ensure the number of enrolled international students on each campus is set at levels that ensure the quality of teaching and students services, for both domestic and international students, remain of the highest quality. There will be no limits set on postgraduate research enrolments.

## Director of Commercialisation appointed

Massey now has its first ever Director of Commercialisation, Dr Gavin Clark. According to Dr Clark, Massey has not been doing too badly: "A 1 percent royalty return on licensed development of university-developed intellectual property is considered respectable. Massey has averaged 3.5 percent over the past two years. That's higher than Oxford University, which struggled to make 1 percent." Dr Clark would like Massey to approach the 5 percent return he terms 'premier league'.



## Climate change collaboration

Associate Professor Ralph Sims and PhD student Phil Murray, from the Centre for Renewable Energy, are working with United States scientists on climate change research. They will take a lead role in two projects involving a consortium of research organisations. Associate Professor Sims says the international collaboration allows New Zealand to piggyback on the large US investment in renewable energy research.



## Māori potatoes selling now

You say potato, I say taewa. The commercialisation of the Māori potato, or taewa, has been a long-term project for researcher Nick Roskrue. In July a hui was held for marae groups who now grow taewa semi-commercially, feeding their families and selling the surplus. Taewa are grown and sold by the Fruit Crops and Plant Growth Unit at the Palmerston North campus. Many shops have also begun selling the Unit's taewa. There are more than a dozen varieties of taewa, some purple-skinned, others with mellow yellow flesh. The taste is described as buttery.



## Cindy Kiro becomes children's advocate

Dr Cindy Kiro, Massey alumna and Director of the University's Waiora Centre for Public Health Research, is New Zealand's new Commissioner for Children, replacing the often controversial Roger McClay. A mother of two, Dr Kiro is the first woman to hold the position. She plans to return to the University when her term ends.

## Film school proposed

An elite, postgraduate film school has been proposed for Wellington. Deputy Vice-Chancellor – Wellington, Professor Ken Heskin, is driving the proposal, and has sought advice from leaders in the film industry, including Peter Jackson and Fran Walsh. Professor Heskin came to Massey from Melbourne's Swinburne University of Technology, which developed its own internationally recognised film and television school.

## Principal retires

When Professor Ian Watson became Albany's Founding Principal the campus-to-be was literally green fields. Ten years later, as he enters retirement, he should be feeling pleased. His campus now has more than 6,000 students, a complex of stylish buildings and a thriving business incubator.



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Dr Robert C. Camp, the keynote speaker, formerly of Rank Xerox (US), is the author of the first book on benchmarking, the influential bestseller, *Benchmarking: The Search for Industry Best Practices that Lead to Superior Performance*. This is a one-off opportunity to hear from the most widely recognised expert on benchmarking.

The conference is being organised by the Centre for Organisational Excellence Research (COER), Massey University. COER is at the leading edge of best practice research as demonstrated through its work in developing the [www.BPIR.com](http://www.BPIR.com) (a comprehensive management information resource used by businesses all around the world), its leadership of the New Zealand Benchmarking Club ([www.nzbc.org.nz](http://www.nzbc.org.nz)), and its innovative Doctoral research programmes ([www.coer.org.nz](http://www.coer.org.nz)).

For more information contact

Dr Robin Mann. Phone (06) 350 5445  
email [r.s.mann@massey.ac.nz](mailto:r.s.mann@massey.ac.nz)

## Lincoln University and Massey in talks

Talks between Massey's College of Sciences and Lincoln University have been the cause of media speculation: could this be a courtship? Not in the sense of a marriage. The two institutions are simply discussing an 'alignment of capabilities in agricultural and life sciences'. An alignment would be sensible. Between them, Massey and Lincoln hold a large part of New Zealand's key expertise in the economically crucial biological industries.



## Protein analysis spectrometer purchased

The single biggest capital item of research equipment owned by any New Zealand university is a superconducting 700 MHz Nuclear Magnetic Resonance (NMR) spectrometer. Worth \$3.3 million, and the only one in New Zealand, the NMR spectrometer is housed in the Centre of Structural Biology on the Palmerston North campus and available to researchers inside and outside the University. Massey is a leader in the field of protein chemistry, but until now researchers have had to take their material offshore for analysis, says Professor David Parry. New Zealand's primary exports – meat, wool and leather – are protein-based. "What's most exciting is the depth and breadth of science that the new machine will support," says Professor Parry.

## Calling Information Systems graduates!

The IS Department goes from strength to strength, and we'd like to hear about your progress in the ever-changing world of information systems. Let us know, with a quick email to Rachael (contact details below), where you are working, what you're up to, and any other news you think might be of interest to us. We would like to be able to include your achievements and experiences (with your permission of course!) in our departmental publicity material.

If you're ever in town you are welcome to visit us and let us know what you're up to; and maybe you'd like to share your experiences with the new generation of IS professionals coming through. They always appreciate hearing stories from the real world!

If you are interested in expanding your qualifications in Information Systems and want to find out about postgraduate study please contact:

Academic Administrator  
Rachael Carruthers, Phone (06) 350 5524  
email [R.E.Carruthers@massey.ac.nz](mailto:R.E.Carruthers@massey.ac.nz)



## 'Bob's Best'

Massey student Haydn Turner took the Menswear and Supreme Awards at the 2003 LYCRA® HAS IT™ Student Fashion Design Awards. 'Bob's Best', his entry, was an ensemble of man's jacket, shirt and trousers. This year's awards had the theme 'Play Planet'. Massey student entries also won the Streetwear and Avant Garde sections. The Awards have six sections in all.

## Dyson Award winners

All three of the finalists in the highly rated Dyson Product Design Award were Massey Design graduates. First place went to Lyndon Craig with his 'Digit', a fingerless glove plus electronic reader that uses wireless technology to speed up fruit measuring in the orchard industry.



## Krefeld goes to the doctor

It is thought that Krefeld, one of a pair of golden lion tamarins at Wellington Zoo, broke his arm falling from a tree in his enclosure. He was operated on by Massey orthopaedic surgeon Cameron Broome, who inserted six pins into Krefeld's arm. Krefeld convalesced in a specially constructed 'ward' in the Wellington Zoo within sight of his tamarin partner, and ten weeks later Mr Broome removed the pins. The arm is expected to be a little stiff for a while, but the German-born golden lion tamarin, one of only four in New Zealand, is expected to soon be the monkey he was before.



### New Extramural Courses Graduate level English and Media Studies courses

The School of English and Media Studies is developing its extramural programme at graduate level. In 2004 the following papers are available:

- 154.701 Modern and Postmodern Visual Culture (Double Semester)**
- 139.702 Criticism, Theory, and Research (Double Semester)**
- 139.707 Women, Desire, and Narrative (Double Semester)**
- 139.735 A Topic in New Zealand Literature (Double Semester)**
- 139.753 Community Theatre (Summer School 2004/2005)**

Enquiries: Email [wwengl@massey.ac.nz](mailto:wwengl@massey.ac.nz) or phone (06) 3505799 extn 7311.

### 171.364 Landscape Revegetation

People have different ideas of what constitutes landscape revegetation. At one extreme, there are those who can see native plants used in an inspirational way in design work: one native plant used to good effect can evoke a sense of place that can transport the observer to a mountain top while plodding a city pavement. At the other end of the spectrum, there is ecological restoration. This paper is intended to help you understand the different approaches and methods used for the revegetation of disturbed land, concentrating on the use of native plants. The course includes the conservation of existing remnant communities, which are often the reason for revegetation. For more information contact John Clemens, Institute of Molecular Biosciences, [J.Clemens@massey.ac.nz](mailto:J.Clemens@massey.ac.nz).

### 134.205 Logic

In 2003, Dr Adriane Rini taught a very successful course in Logic. From 2004, that course will be available in extramural mode as well. It should appeal to any student majoring in Philosophy, and to anyone who wants to learn formal skills in argumentation. Enquiries to Dr Rini 06-3507463 or [A.Rini@massey.ac.nz](mailto:A.Rini@massey.ac.nz)

### 120.218 Flora of New Zealand, Double Semester 2004

Come on a journey of discovery as we examine the major groups of plants in New Zealand. We will consider the morphology, anatomy and reproduction of New Zealand plants that will help us understand relationships between different groups and speculate on possible evolutionary origins. While emphasis will be placed on native species we will consider the impact of human settlement on the composition of New Zealand's flora. There will be a three-day contact course, including lab sessions and a field trip. The prerequisite is 120.101 (Biology of Plants). For more information contact Paul Stock, Institute of Molecular Biosciences, [P.A.Stock@massey.ac.nz](mailto:P.A.Stock@massey.ac.nz)

### 171.232 Horticulture and Human Well-Being II

As a companion course to 171.230 Horticulture and Human Well-Being I, this new paper will expand the scope from individual well-being to that of community, society, and the environment and how the beneficial effects of plants on human well-being can be applied and integrated at community and societal levels. Examples include school and community garden programmes, use of horticulture in physical and mental healthcare settings, correctional institutions, environmental restoration projects, and for urban revitalisation and crime reduction. The emphasis will be on developing integrated strategies for using gardens, plants, and horticultural activities in the New Zealand context. For more information contact Judith Kidd, Institute of Natural Resources, [J.L.Kidd@massey.ac.nz](mailto:J.L.Kidd@massey.ac.nz) or phone (06) 350-5799 extn 7952.

## LETTER TO THE EDITOR



An ideology is a thought-system that predisposes a person, group or society to ask certain questions and to ignore — or even to resist asking — certain other questions. The title of your article "The trouble with boys" (MASSEY 14, April 2003), which reiterates mass media headlines on boys' education, is a case in point.

When feminists decided that girls' education was lagging behind in certain respects, they certainly did not blame the girls for the problem — they blamed the "patriarchy". They created the slogan "girls can do anything", and the female-dominated education system has been — ideologically, if not actively — biased in favour of girls from that time onwards.

So I do not think that there is a "trouble with boys". I think that boys can do anything — that their female teachers let them do. I blame the matriarchy, and the sooner the New Zealand male plucks up the intestinal fortitude to stand up to his partner and criticise feminist ideology, the sooner boys will be shot of their "problem".

Massey needs men's studies courses to ask the questions that women's studies courses refuse to ask.

Peter Zohrab



**Dandelion:** The leaves are shiny and hairless, each margin cut into great jagged teeth, either upright or pointing somewhat backwards, and these teeth are themselves cut here and there into lesser teeth. This somewhat fanciful resemblance to the canine teeth of a lion gives the plant its most familiar name of dandelion, a corruption of the French *dent de lion*, an equivalent being its former Latin name *dens leonis*.

When it came to plants, Dame Ella Campbell was a champion of some of those least likely to find popular regard. Once there was a would-be producer of cut flowers who was plagued by dandelions competing with his tulips and daffodils. In desperation, he consulted the country's leading horticultural expert. "I recommend that you learn to love dandelions," said Ella.

Dame Ella Orr Campbell was raised in Dunedin. There, together with four siblings, she ranged the lush garden tended by her mother, a pharmacist with an interest in botany and a love of orchids. But Ella remembered her fascination with plants small, wild and uncultivated as having more likely begun during daybreak excursions with her father, a builder. In the morning chill, as her father collected the lamps left out to light his sites, Ella would forage in the nearby bush or crouch beside the verge, examining the tiniest weeds; making discoveries.

It was at her father's wish that Ella spent a year studying to be a teacher, but this was never going to be enough for her. No sooner had she finished than she enrolled for a BA, and in 1934 she graduated with an MA in botany, on the life history and development of native water fern. She was briefly a botany lecturer at Victoria University, then headed back to Otago University where she taught over an eight-year period. It was while on her way from Otago to the Coromandel to study frogs that she paid a visit to Massey and was promptly offered a position.

Ella was appointed a lecturer at Massey Agricultural College in 1945, where she would at first teach plant morphology and anatomy as part of a developing subject: horticulture.

In July of 2003 Dame Ella Campbell died in Palmerston North in her 93rd year



**Bryophytes:** Non-flowering plants that live in damp places and that reproduce by means of spores. Bryophytes can be divided into three classes: the Musci (mosses), Hepaticae (liverworts) and Anthocerotae (hornworts). They are generally small and low growing.

In 2003, 57 years after her arrival at Massey, Ella remembered such difficulties as there were with amusement: “They thought they had me on two counts, the agriculture people. A new subject, horticulture – and what was that supposed to be about and what use was it? And of course I was the only woman on the staff and was the only woman for many years.

“It’s true, yes, people sometimes thought I was the matron. But I wasn’t really around the place long enough to be mistaken for the matron. I was there for the lectures and the students, of course, but we would get out in the fields and to the bogs, you know?”

During her years as a lecturer at Massey, Ella’s horizons grew as her interests narrowed. From early wanderings in the residual bush of the Otago Peninsula she had been captured by bryophytes, mosses and liverworts in particular. This focus remained throughout her career and increasingly dominated her research, with just one exotic addition to her academic nursery: the orchids her mother had loved.

**Bog:** A nutrient-poor, peat-accumulating wetland in which peat mosses, ericaceous shrubs, and sedges play a prominent role. High water levels and low oxygen and nutrient levels mean decomposition of litter occurs only slowly.

Ella had a longstanding interest in peat bogs, those places where layer-on-layer of partly decomposed plant remains have accumulated in acid, waterlogged soils over thousands of years. She came to know the peat bogs of the Waikato intimately, travelled to many others around New Zealand, and was regularly consulted by regional councils on peatland management issues.

These days bogs are acknowledged as ecologically interesting and important, but for most of Ella’s time bogs were an unusual speciality.

“There’s a resurgence in interest now. But apart from Ella, there has been very little recent research,” says Jill Rapson, curator of the Massey herbarium named for Ella Campbell. “Why the resurgence? Well on the one hand some people want to use bogs to mine peat, while others see them as a way of capturing and sequestering carbon dioxide and fulfilling our

obligations under the Kyoto protocol. Bogs are also useful for carbon dating.”

Dame Ella was an expert on the sedge-like, restiad bog plants which replace the Sphagnum found in northern hemisphere mires. It was Dame Ella who first noted, among her many other discoveries, the growing habits of wire rush, a restiad found only in some southern hemisphere bogs. “Their roots grow upwards!” says Jill, who, with student Tarnia Hodges, is researching the ability of such roots to scavenge the few nutrients coming into a bog via rainfall. “It’s the only bog plant that does that.”



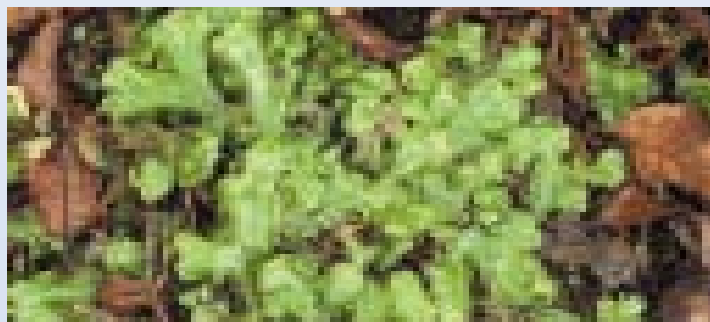
“Because she was a single person, Ella had rather fixed ideas about some things. But I always felt that she had that Scottish sense of ‘if you are going to do it, do it properly!’ and this would have annoyed those who were on their own power trips.

“She used to coach the women’s hockey team and as she got older clearly had a great affection for Massey and its graduates and wanted the best for the place that she had worked at for so many years.

“I kept up a correspondence at Christmas time every year and she visited me once at Saskatoon when she was on a North American trip. On my few visits back to New Zealand, I always made a point of visiting her.

“You can see that I had a high regard for her. I don’t think many people at Massey in those earlier days realised that she had such a high reputation internationally for her scientific work. One thing that always impressed me was that she was one of the few international taxonomists who could write the official naming description in Latin – a testimony to her schooling in Dunedin.”

*Graham Simpson completed his Master’s in Agricultural Science in*



**Microtome:** A sharp-bladed instrument used for sectioning of wax-embedded biological material for microscopic analysis.

Her beloved hornworts led Dame Ella to travel widely. In her early years at Massey she travelled to Cambridge University, to the University of Cincinnati and to the Douglas Lake Biological Station of the University of Michigan. As a world expert on liverworts and, later, an internationally accredited specimen orchid judge, she became familiar with most parts of Asia and Europe. At the 300th anniversary of the Berlin Botanical Gardens, she delivered her speech in German, as a member of the Goethe Institute. Wherever she went she kept notes on the people she met, notes she would file and pass on to travelling students and graduates.

Kindnesses like these sometimes surprised people. “She was a formidable and memorable teacher and would not suffer fools gladly,” said former colleague Professor David Fountain at her funeral. “I’m sure the students of the 40s, 50s, 60s and 70s will remember her sharp wit and the even more razor sharp glance which accompanied any rebuke she gave – and she was not hesitant in giving these.”

Ella Campbell ‘retired’ from Massey in 1976 but continued her research, ensconced in the Ecology Building on the Palmerston North campus, for 20 more years. This was when she published the bulk of her 100 papers. Her list of publications, rather than being ‘as long as your arm’, was put at “two arms and a half” by University orator Robert Neale.

Fountain remembers her as a constant presence: “Her door open from early in the morning and she dissecting samples in her lab, or her room where microscopes and stains were side by side with open books, manuscripts in preparation or review. She worked quietly, independently – some thought secretly.”

To the distaste of some, she maintained a large collection of living mosses and liverworts. “The collection was tatty at first sight – housed in grey metal bookcases each specimen growing in the low light of shelving tucked under the eaves of an inner courtyard of the building. Long sleeves of plastic bags rattled in the wind for she had devised a bag-based means of providing the moistness required for these plants. They survived for years, decades, despite occasional threats of removal when important personages toured the building, for they were an eyesore.”

During this time Ella was admired by many but to others she appeared incessantly focused on her bryophytes and blinkered to many of the world’s problems. “She never to my knowledge possessed a TV and rarely listened to the radio,” says Fountain.



“And she could argue tenaciously along sometimes outrageously un-PC lines on issues of social or political debate.”

She was famed for her skill in making up microscope slides (a now-vanished art) and she was a master of the microtome, a manual specimen slicer now replaced by the automated ultratome. Ella's was a handsome gadget, rather like an instrument of torture in miniature whose tiny victims were specimens embedded in wax, to be sliced into fine ribbons and laid out for inspection on microscope slides.

She was envied for her international collection of books, acquired by all manner of means and guarded fiercely. Fountain remembers a book being ‘borrowed’ from the shelves of her office when she was away. “Her powers of observation, honed on those tiny plants, quickly revealed the gap in the shelves on her return and she was heard to utter the words: ‘He’s a blackguard!’.” The book was returned. The borrower, Dr Al Rowland, in turn achieved the reputation of the best microscopist on campus.

Ella Campbell received many honours, including the Massey Medal in 1992. She was made a Dame Companion of the New Zealand Order of Merit in 1997. She never married, and valued her family and friendships. One young friend, Joanne Holdaway, pleased her greatly by writing a biography, augmented by conversations at her Palmerston North rest home where Joanne took a temporary job to be near her.

Much of Ella's collection of slides, books, microscopy materials, dried plants and instruments is already at the University's herbarium. The rest now sits in ceiling-high stacks of boxes in a storeroom at the Ecology Building, waiting for sorting and classification. It won't be easy. Dame Ella could be cavalier about labelling. “Why did she need to bother labelling them at all?” says Jill Rapson. “She knew very well what they were.”

There's also a massive, rare three-volume set of books on liverwort taxonomy, all in German. Inside, a note from the University Library, dated 1988, allows Ella Campbell long-term loan, “until the books are needed.” The Library never reclaimed the set, losing track of the loan, but Ella did, and returned them on packing up her office in 2001. Subsequently the books were donated to the herbarium, the library perhaps recognising that it may be some time before they will again have to meet the needs of an obsessive, German-literate, liverwort lover.

## The Dame Ella Campbell Herbarium

Although officially named in April 2003, the Dame Ella Campbell Herbarium has existed informally since 1945, when a collection was instituted by the then department of Agricultural Botany. Those agricultural beginnings are evidenced today in extensive collections of naturalised weeds and grasses, but the herbarium's greatest strength – and the reason why it is one of 13 internationally recognised herbaria in New Zealand – is its collection of lower plants. (The herbarium was officially designated MPN 1977 under the curatorship of Dr Margot Forde.) Of the 30,000 specimens in the collection, half are lower plants, a most unusual bias according to the herbarium's current curator, Dr Jill Rapson.

14,290 specimens of bryophytes were donated to Massey by Amy Hodgson in 1972. Donations and exchanges also explain the fact that some of the herbarium's specimens predate it. The oldest collection, from 1889, is an award-winning folio of ferns compiled by Mr E Maxwell for the Melbourne Exhibition, the donation arranged by a former vice-chancellor, Dr JC Andrew. The flora of the volcanic plateau and the lower North Island is richly represented.

The herbarium lends out bryophytes to researchers worldwide. “In fact we frequently have to fight to get out specimens back again,” says Dr Rapson.

Within Massey, the collection is used by students and postgraduates for identifying specimens they have gathered in the field or when looking at how to go about putting together their own collections: pressing and drying plants, affixing them to cards, and cataloguing the species and location. Some of these collections are eventually donated to the herbarium. Making up a collection is a process that has changed little over the centuries, though the catalogues are now being transferred to computer databases, a mammoth task initiated by former curator Dr Heather Outred. The Dame Ella Campbell Herbarium is now extending its collection's pollen databases and has begun collecting information about the DNA sequences of its specimens.

Fittingly, on the day MASSEY spoke to her, Dr Rapson had just returned from an annual gathering of Australasian bryologists, this year held in the Hunua Ranges. Over several days, 30 or 40 bryologists wandered the forest, finding specimens for identification. “You collect and then you stare down microscopes, and if you can't figure out what you've got, you can just ask the world expert alongside you,” explains Dr Rapson.

As was fondly remembered at the Hunua gathering, the first of these events was held in the Pohangina Valley in 1969. The organiser? Ella Campbell.



Professor Brian Springett, Vice-Chancellor Judith Kinneer, Dame Ella Campbell and Associate Professor Ed Minot. In the background are Dame Ella's nephew, Gavin Adlam, and niece, Rosalie Adlam, flanked by Dr Alistair Robertson and Professor Russ Tillman.



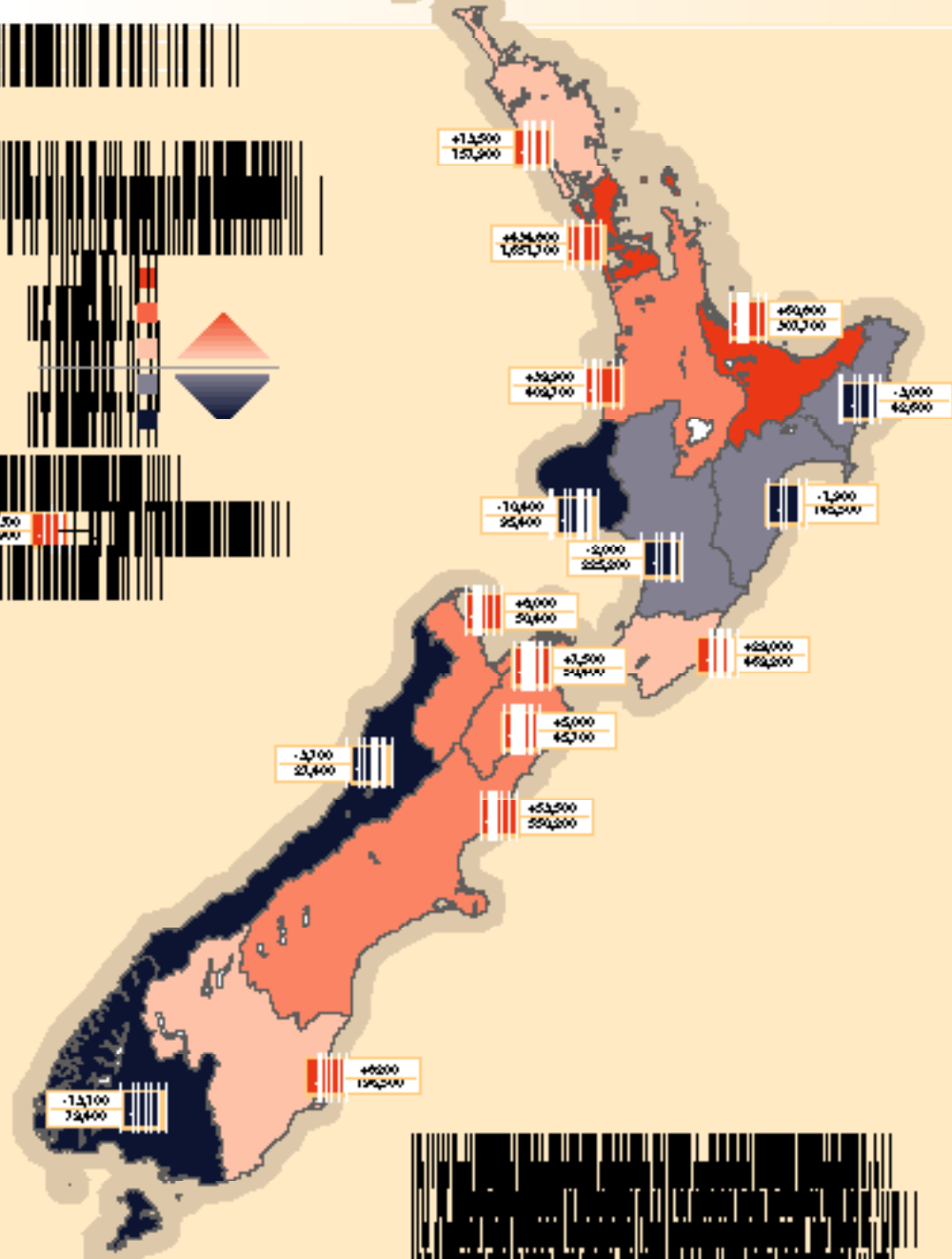
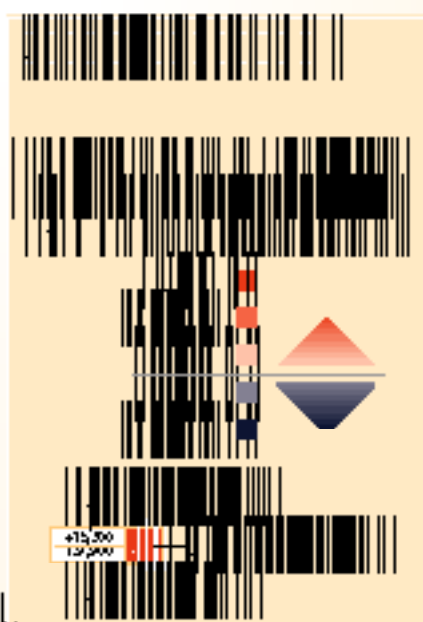
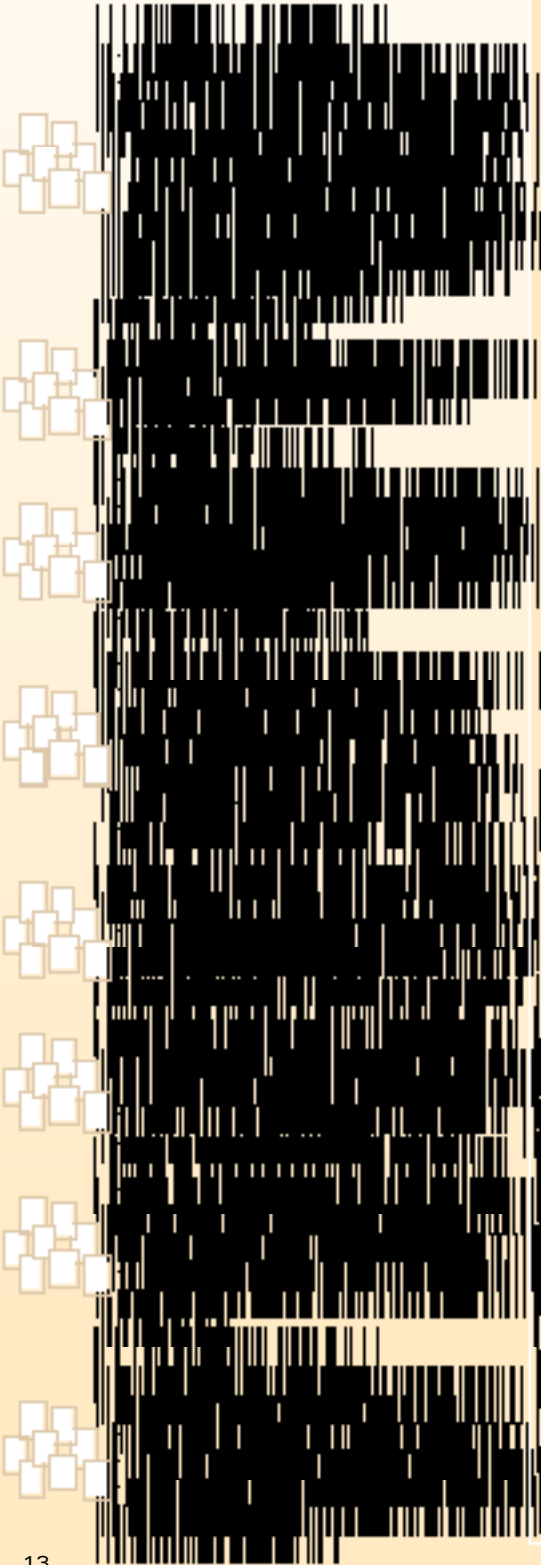
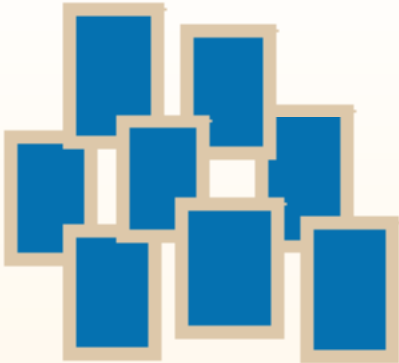
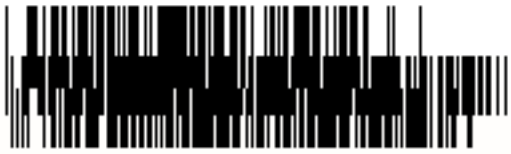
At work in the herbarium are herbarium keeper Lesley van Essen, curator Dr Jill Rapson and volunteer Barbara Larch. Volunteer Sue Hall is at the back.



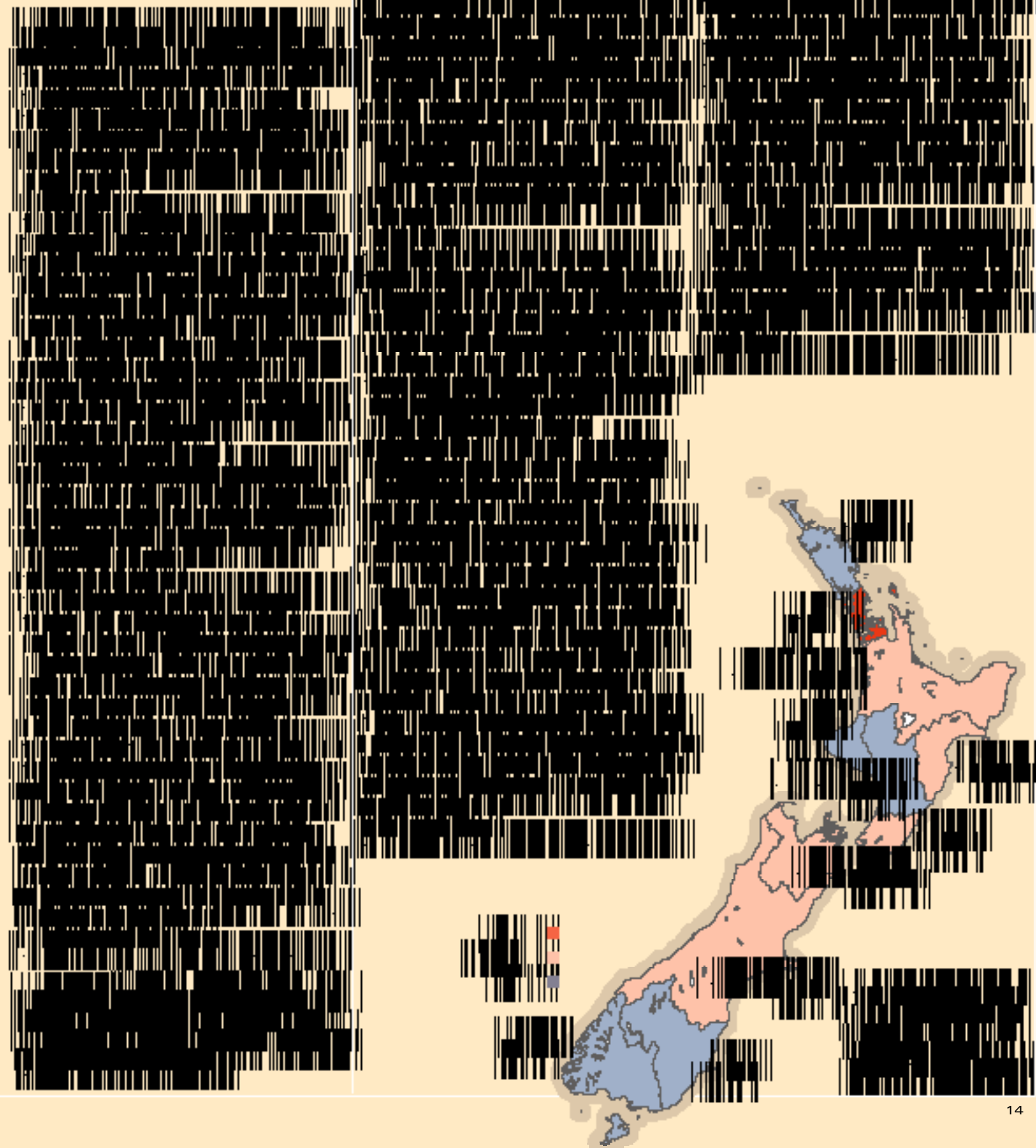
A lab session in the Ecology Building.

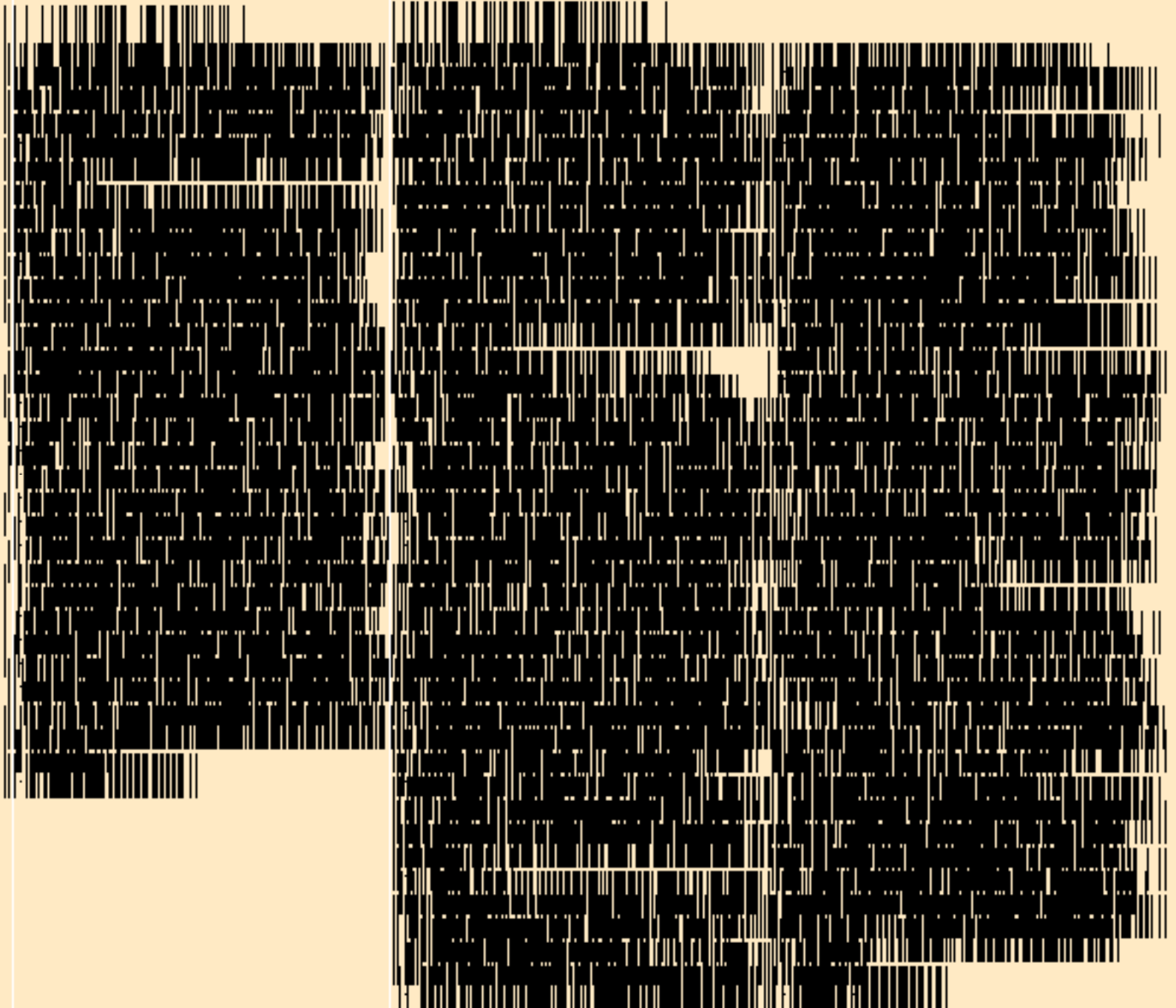
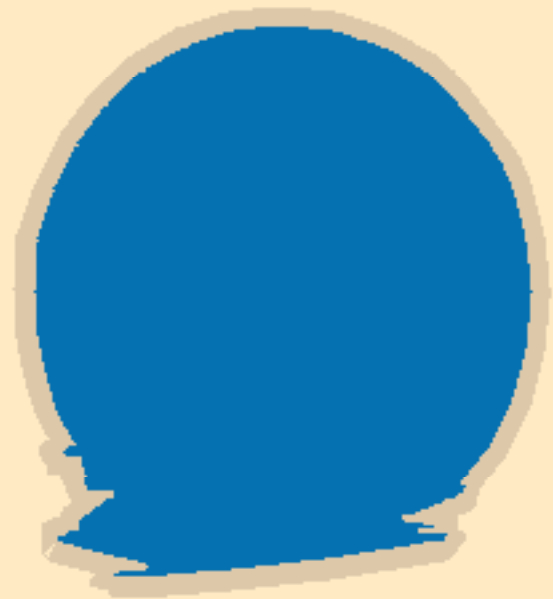


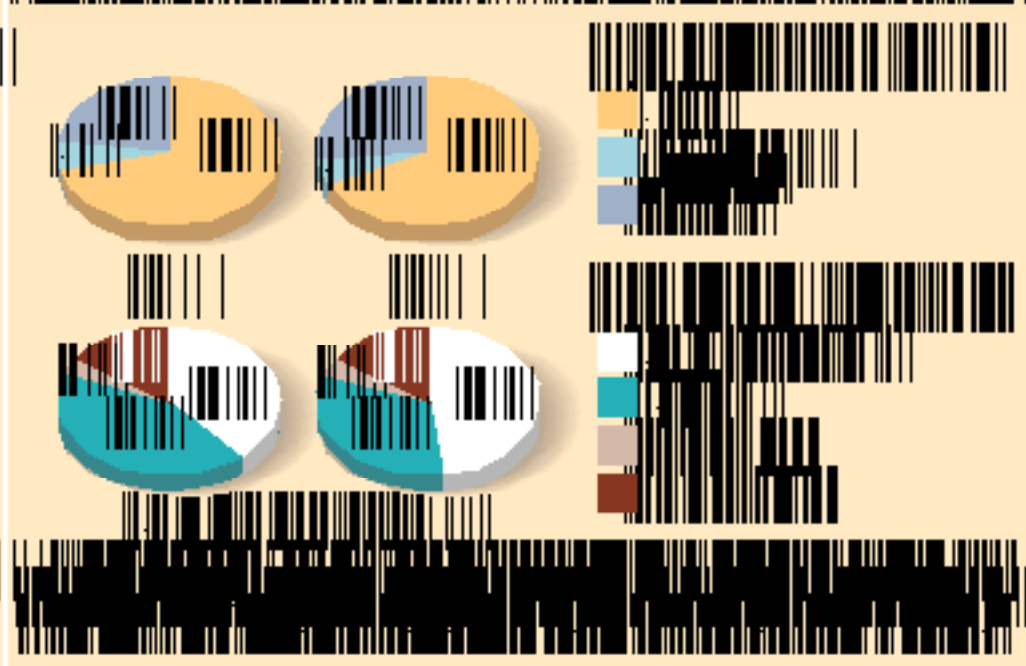
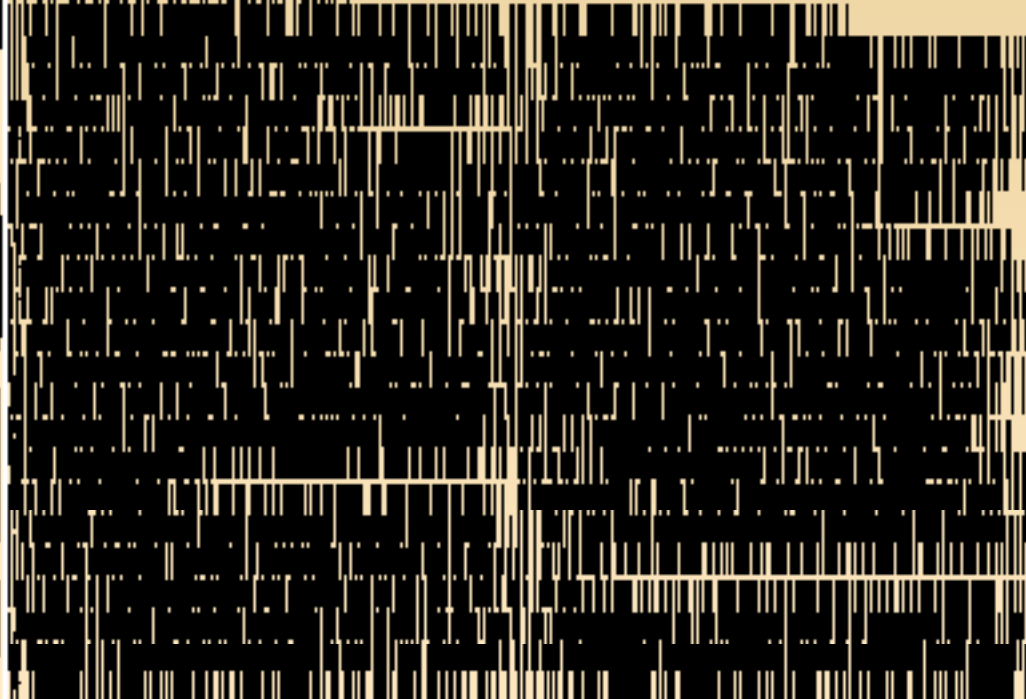
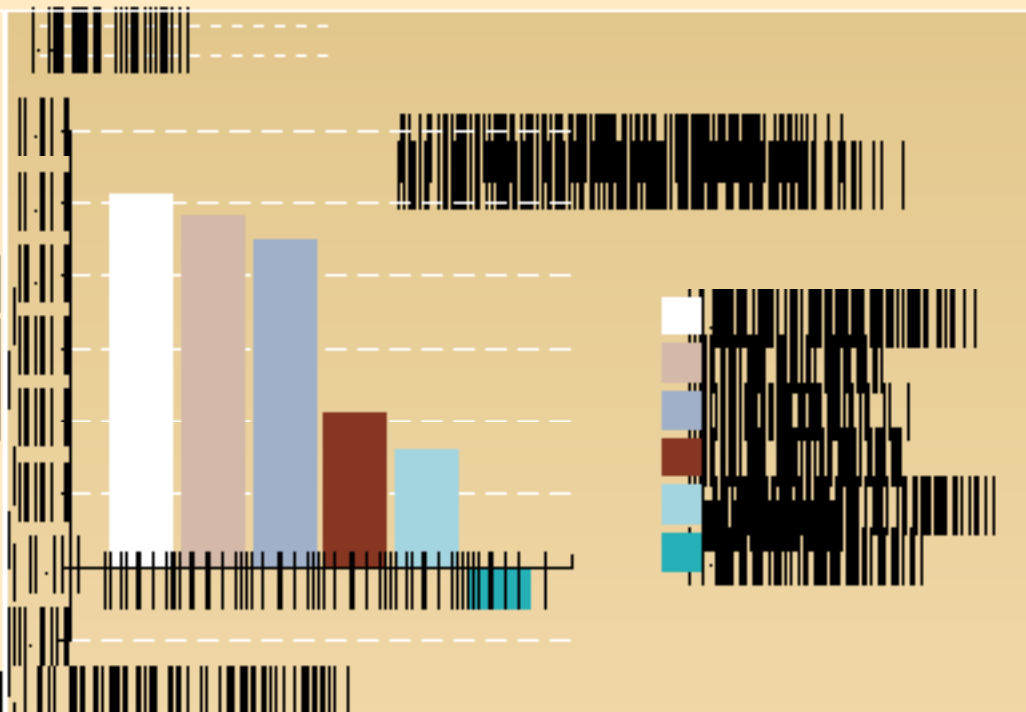
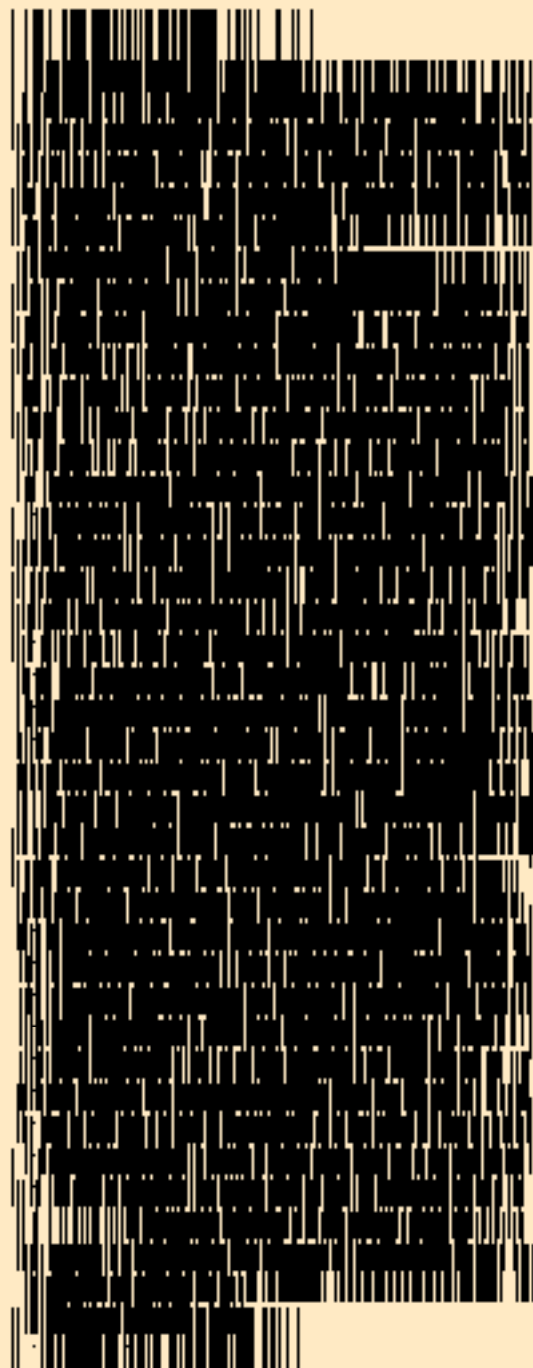
Lygodium articulatum (the climbing fern), MPN 002623, collected by AE Esler, Tauhoa Rodney district, in 1961.





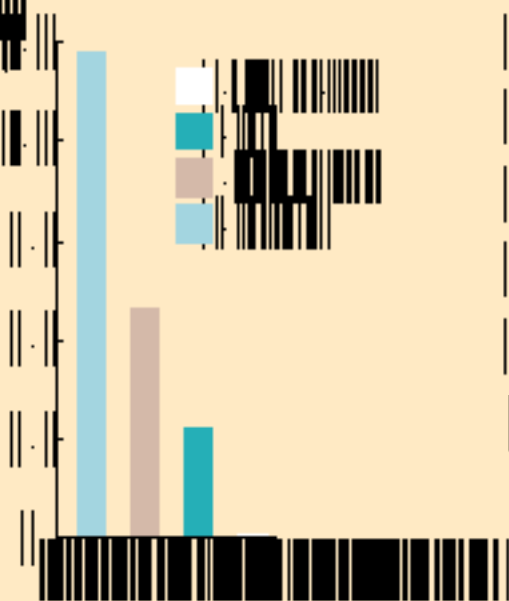
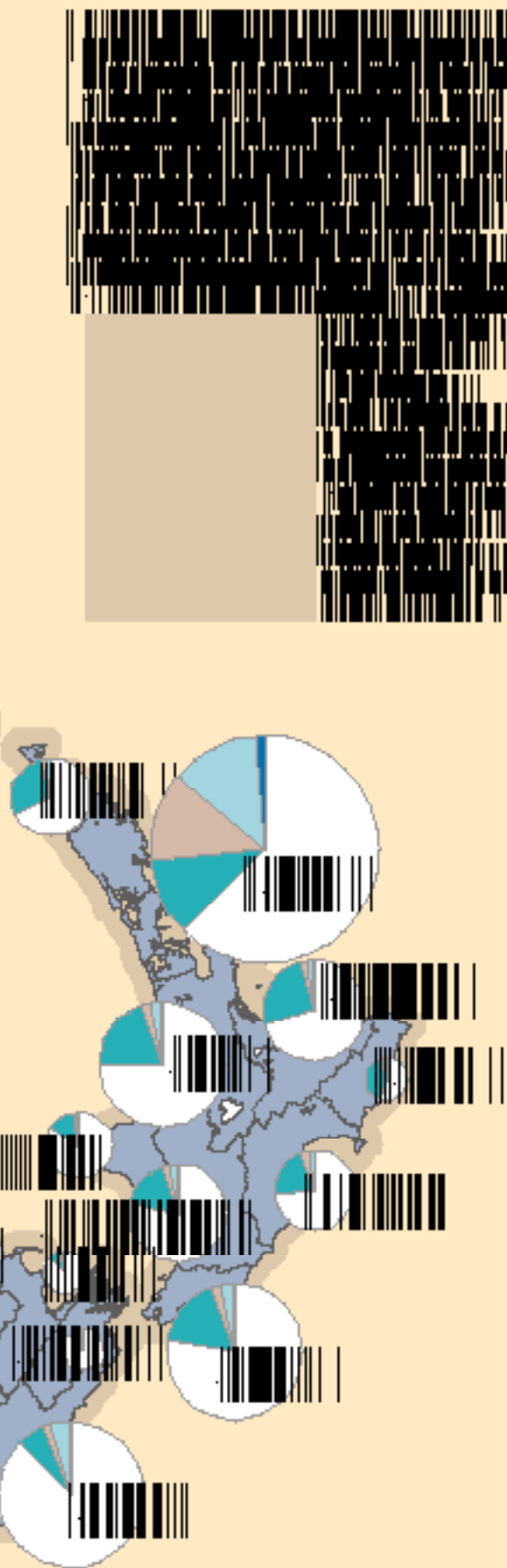












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**Bryn Evans**

Certificate in Professional Photography

Six months out from graduating Bryn Evans knew he had made the right career choice: a warrant was out for his arrest and he was being hunted down by the army. He was living in caves, dining on lizards. Times were good. This was just the career break he needed.

# staying focused



BRA rebel soldier freshly returned from an ambush. Bougainville, Papua New Guinea, 1997





The Maha Kumbh Mela Festival, the largest gathering of people in the history of mankind. India, 2001

## f1.8

But today, here in Wellington six years on, Bryn Evans, a man who as a photojournalist is unperturbed by bullets flying overhead, is looking strangely nervous about being put to question.

He sits with his shoulders slightly hunched, his fists wedged between his knees, but when his interest catches he unfolds – his arms sweeping into gestures, his legs extending and crossing – and he becomes a large man, someone with heft, a useful person to have about if things got dicey. In his military-green top and a pair of jeans he looks almost field-ready. The only jarring touch is the slightly spiked haircut and the abbreviated designer sideburns.

If I have expected some Hemingwayish swagger from Bryn then I am to be disappointed. He is anxious – almost disturbingly so – not to present himself as more than he is. His speech is uninflected and full of hesitations as he grasps at the right words.

He is a bit wired, he begins by admitting. Twenty-four hours ago he was on a Hercules back from Bougainville. This was his second trip. On his first, back in 1996, the conflict was continuing: the Burnham Peace talks that would lead to the arrival of a peacekeeping force were still a year away. This time he has been there to see the peacekeeping force depart after a successful intervention.

In 1996 Bryn lived as a fugitive. This time the most

traumatic event has been the loss of his cameras, stolen from him within hours of his arrival: his photos this trip were snapped on a hurriedly purchased collection of disposable plastic cameras.

Bougainville before the peace; Bryn the graduate on the make. Bougainville making its way as the peacekeepers depart; Bryn the established photojournalist and soon-to-be father.

These sets of circumstances are the parentheses to six footloose years during which Bryn has travelled from assignment to assignment, more than a few of them being conflicts or disasters.

## f2.8

What decides someone on a career photographing conflicts and disasters in faraway places? The storyteller in Bryn identifies several plot points. The first was his childhood experiences in the Pacific. Although raised in Opotiki, Bryn spent a number of interludes in the Solomon Islands, where his father worked with VSA. The visits awakened him to an interest in photography and the wider world. He became “a young man

hooked into amateur travel photography”. He even had an article published in the Solomon Island airlines in-flight magazine – “nothing too flash”, he says – about his father’s work with UNESCO setting up two world heritage parks.

The second was an excursion into besieged Sarajevo. After leaving school at 16 Bryn had drifted for a while, begun and abandoned an apprenticeship to become a motorcycle mechanic, and then headed for Europe, arriving in London when he was 19. In the early 1990s at age 22 he was working in Salzburg. Yugoslavia was breaking up and refugees were flooding across the border into Austria. A friend who was involved in aid work invited Bryn to visit Sarajevo. Though he was there for just 48 hours the trip gave him what he terms a glimpse of the human condition – as well as a taste of the excitements of war. “When I came back I started watching CNN and BBC and all these things became real to me. That was the moment when I realised I wanted to study photography.”



‘The Farm’. Drenching sheep. East Cape, New Zealand,



MEF soldier waiting to head out on patrol. Solomon Islands, 2000



**f4** Bryn returned to New Zealand and enrolled in the one-year Professional Photographic Certificate offered by the Wellington School of Design. At 25 he was a mature student, but not particularly old for a course where most students were in their mid-to-late twenties, says photography lecturer Tony Whincup. “Many of them were stepping out of quite well-paid jobs and were looking for something more fulfilling. They were driven people who were quite clear about what they wanted: to make life in photography.”

Though at first a little resistant to the notion that other people should pass judgement on creative work and to the idea of being driven by marks, Bryn was a capable student. At the end of the Certificate six students would be offered an Agfa scholarship to undertake a further year, during which they would undertake a personal photographic project and produce a portfolio. Bryn was one.

“Getting the Agfa scholarship instilled in me a sense of being special,” says Bryn. “You need that. It’s a very competitive industry. You are self-employed and you have to get up every morning and push yourself.”

He graduated in 1996, and, as many a graduate must, “walked down Cuba Street and thought what the hell do I now?” He knew he would have to leave New Zealand. For an aspiring professional photographer whose interest was international stories, there were few potential New Zealand employers.

**f5-6** From his boyhood travels Bryn had a good knowledge of the Solomons. Now he formed a plan to return there and to have himself smuggled into war-racked Bougainville. For four months he washed dishes getting the money to get up to Bougainville. He found a contact at Time

magazine. Only one other journalist had made it in to Bougainville with the BRA (Bougainville Revolutionary Army). If Bryn managed to bring back photos, would Time be interested in looking at them?

“You know damn well they are going to say, come back with whatever you have.” And then? “You blag yourself a bit, and then you say, hey, I am working with Time. You need that credibility. No one needs to know you’ve been washing dishes.” Bougainville was under blockade by PNG. Bryn went to Honiara and was eventually smuggled up through the Solomons by small boat.

It was a defining experience. “I was introduced to warfare and the victims of warfare and the social consequences. I was hunted down. They had a warrant out for my arrest, a price on my head. I stayed in caves for the first two weeks I was there and met some pretty amazing people.”

From Bougainville, the now as-published-in-Time photographer headed to the UK. Invited to go to Kosovo, he chose instead to return to the southern hemisphere to go into Timor with some of the first ground troops. Then came an event in Bryn’s own territory, the Solomons coup.

“Most of the mainstream media were focusing on the Fiji coup, and the Solomons coup was going on, and that was much worse for loss of human life and

hardship. I was really the only journalist there. I was on the front line of an enclave around Honiara where a lot of people got killed, and once again fighting was taking place that shouldn’t have been.”

From there Bryn spirited himself into the Indonesian territory of West Papua (formerly Irian Jaya), where another freedom struggle was going on. High in the oxygen-thin air of the Castenz mountains he illicitly visited Freeport, the world’s largest copper mine: trucks that were several stories high, expatriates living inside enclosures, and, away from the mine, locals living a life not far removed from the stone age and allegations of torture and killings by the Indonesian military. He did stories about the mine, about the freedom fighters, about slave prostitution.

“Then in 2001 I had the opportunity to go to the oldest and largest festival of mankind, the Hindu festival of Maha Kumbh Mela in Allahabad. It happens once every 140 years. They estimated 70 million people came to this one spot over a six-week period. It was the most incredible experience of life and the afterlife and everything we hold dear. An incredible visual feast. I hadn’t been to India. It blew me away. I was there for five days and the Gujarat earthquake happened.”

Bryn was the on the first flight in to Gujarat, where 35,000 people lay dead. “So I went from the most



MEF patrol caught in an ambush. Solomon Islands, 2000



auspicious celebration to the worst of tragedies. I spent five days in Gujarat, which was about as much as I could have taken.”

Holi Festival. A celebration of colours. India, 2002

**f8** The journalists and photographers who follow wars and disasters are a small, close-knit fraternity, says Bryn. You’ll see same people in Gujarat that you see in Kosovo,” he says, “and suddenly there’s an open bottle of whisky on the table. Sometimes people say photojournalists are just in it for the ego – the bang-bang club scenario – sometimes that may be true.”

Bryn doesn’t pretend that the lifestyle is not without its seductions. “Any photo journalist who says I am doing this for mankind and I want to save the world is sort of lying. You have to be addicted to the game, because that is what gets you there, the element of danger, of adrenaline and addiction.”

So how does Bryn react to danger? “I tend to shut down and not think about it,” he says. “I love getting into those situations. I am very good at handling myself.” It’s this ability as much as any photographic ability that makes for a good photojournalist.

“You have to get to these countries, you have to travel great distances, you have to live with your subjects in very severe conditions, eating and drinking as they do,” says Bryn. In Bougainville Bryn ate lizards and lived in caves. In East Timor he

scrounged ration packs from the army and lived in a room without a roof.

This is how he likes to live, adapting to exigencies. But does he have qualms about what he does? For the morally squeamish it is hard to forget that while the journalists and photographers are there by choice and are no more than a plane ticket away from the safety of home, those whose misery they view have no such choice.

But it is only because of those journalists and photographers that the world’s troubles come to our attention. Bougainville, says Bryn, made him aware that there are people whose struggles are just and whose plight is unnoticed. “It suddenly gave me a

personal reason to keep doing what I do. Everyone deserves a voice.”

It has been said that still photographs are somehow able to crystallise an emotional response in a way that film or television can’t. What do you remember of 9/11? The television footage or that one encapsulating moment: the incongruous, horrifying beauty of flame blossoming from a skyscraper, the business woman surreally coated in concrete dust? Memory, like photography, works in freeze frame.

In Gujarat, Bryn could have done little as an individual. With his photographs the event became ‘real’ to the outside world. Published by aid agencies and in the international press, they helped elicit an



Gujarat earthquake. A father waits for his son’s body to emerge from the rubble. India, 2001



The Maha Kumbh Mela Festival. India, 2001

**f11** After Maha Kumbh Mela and Gujarat, Bryn found himself fascinated by the phantasmagoria of sights and stories offered up by the Indian subcontinent. At Bryn's instigation, Panos pictures sponsored him to live in Delhi as their correspondent. Meanwhile Bryn's work was being noticed by a documentary production company. After close on

two years in India, Bryn left for New Zealand at their invitation for his debut as a documentary maker.

Girls in the Ring followed two New Zealand women boxers and their odyssey to take part in the first Women's World Boxing championships in Scranton, Pennsylvania. Scranton? "Yes," grins Bryn, "everything you imagine is true: a lot of railway tracks and a lot of empty coal wagons."

He describes the documentary, which would screen as part of TV3's Inside New Zealand series, as "a really lovely story about two heartland New Zealand girls."

"I wanted to tell a very emotional personal story about these two women and their relationship with each other and with their coach, and their personal journey, and why are they boxing – a sport still quite controversial for women. Boxing was the motif [that stood in] for many other things."

The shift from taking still photographs to documentary film-making was not such a leap, says Bryn – as a photographer he had always become close to his subjects – and he revelled in the new medium. "It's oral as well as visual, you have ambient noises, you have music you can add; a whole combination of things you can put together. It just totally blows you away. And your audience is tenfold. Rather than an audience of 10,000 you are getting 120,000 or

## NEIGHBOURHOOD WATCH

Although New Zealand is a Pacific nation, for most of us the Pacific Islands and Melanesia sit at the periphery of our world view: the images we harbour are part National Geographic and part Club Med brochure. Collectively Melanesia and the Pacific Islands have just seven million inhabitants. It's hard to muster much interest.

One of the few New Zealand magazines to consistently run cover of Pacific and Melanesian issues has been the New Zealand Listener, which has carried Bryn's freelance work from the first. Listener Editor Finlay Macdonald is of the opinion that the New Zealand media doesn't cover its back yard as well as it should. "We neglect the Pacific region to its and our detriment." He'd like to carry more Pacific coverage, but it is a matter of striking a balance with the interests of his readership.

The Pacific region has many issues warranting attention. Australia and New Zealand are the two prosperous households in a generally poor and rundown neighbourhood.

Over the last 30 years per capita income has grown at less than 1 percent a year in the Pacific nations, while the population has grown at more than 3 percent a year, and often what income growth there has been has gone to small urban élites.

Then there are problems to do with resource allocation, ethnic division and decolonisation. Part of the background to the Bougainville conflict was the arbitrary decision by the colonial powers that Bougainville should become part of Papua New Guinea, when ethnically and geographically it belongs to the Solomons.

There have been coups in Fiji and the Solomons. In Bougainville the conflict, which had the foreign-owned Panguna copper mine as its flashpoint, is estimated to have killed 8,000 people either directly or as the result of the medical and economic blockade imposed by PNG, and to have displaced more than 50,000 others. This of a population base of 160,000.

Bryn believes that the Solomons and Melanesia have been particularly

disadvantaged by Australia and New Zealand's lack of interest in them.

"This is what I am now writing about for the Listener: our failures and successes in Melanesia. Some of these issues, especially the Solomons, should have been dealt with ten years ago. There were rumblings of the present troubles ten years ago.

"We have to acknowledge that we have some responsibility. We live in this neighbourhood; we are cousins."

Despite Australia and New Zealand's natural chariness about being seen to interfere in the affairs of others – to be tagged as imperialist or neocolonial – Bougainville has shown that a regional response can work.

The Truce Monitoring Group made up of soldiers from New Zealand, Fiji, Vanuatu, and civilian members of the Australian defence forces arrived in Bougainville in 1997 after an agreement was struck at peace talks held at Burnham military camp near Christchurch. In August 2001 a final peace agreement signed between the PNG government and most of the Bougainvillian factions. The Truce Monitoring Group departed in July 2003.

"You had a will by the Bougainvillians foremost to wanting to sort out their own peace and future," says Bryn, identifying the elements of a successful intervention. "You had New Zealand come in at the only time it could with a very New Zealand approach to conflict resolution: not telling people what to do, but working closely with them."

It helped that the TMG included Melanesians. "Australia, given their past history, would not have been able to do it without the three others and we wouldn't have been able to do it without Australia."

The work of New Zealand's VSA also wins Bryn's praise. But Bougainville's social structure has been deeply damaged and the years ahead will be difficult. Bryn was there to witness the local people being persuaded to hand over their weapons.

"It's easy to say 'hand over your weapons and we'll protect you if anything goes wrong'. But imagine you are a young ex-combatant who has spent the last five years fighting. Your parents have been killed, you've seen many of your friends killed, and the way you got that weapon was by killing someone else. It's a trophy, you've given your soul for this weapon. And other people out there want to do you harm. It's hard to go, 'Well here you go,' and hand it over. People don't realise how hard it is."





West Papuan OPM freedom fighters. West Papua, Indonesia, 2000

whatever. The other magical thing is that you can bring in other people you respect and are very good at what they do. A composer or an editor. Everyone brings their input. Your vision becomes organic.”

On the other hand: “You have ten times as many constraints. The organisation. You have a producer to answer to. You have a network to answer to. There is a lot more money involved. I work very independently. I do exactly what I want to do. And suddenly I can’t. You are answerable to many other people, who at times say ‘You can’t do that bro’.”

Back in India – now a documentary maker as well as photographer – he became taken with another story, that of the Taliban national cricket team, who were about to embark on their first international tour to Pakistan. Bryn was chasing a commission to follow their journey from Afghanistan, when two jet planes crashed into the Twin Towers.

“Six months after the US invasion of Afghanistan I got the opportunity to go back and make a documentary and at that point they had become the Afghanistan National Cricket team,” says Bryn. Cricket, which had been picked up by the millions of Afghanis who have been refugees in Pakistan, would stand as a motif for much else. “It stood for Afghanistan’s yearning for international recognition – this whole thing about cricket being a game that

civilised countries play. It was emblematic of a group of cricketers wanting to rebuild their country; they felt very strongly about cricket being something that could bring young boys from the battlefield and get them into an intellectual game, working together, before they got thrown into the classroom. It was even emblematic of Afghan politics. The national game is buzkashi [two teams on horseback compete to be first to pitch a dead calf across a goal line in games that can last up to a week] which has no rules, anything goes – and that’s Afghan politics. And suddenly you had a new interim government, and cricket, a game with rules.”

Together with a camera team, Bryn accompanied his idealist cricketers as they travelled a destroyed Afghanistan in a Hiace van taking cricket to the schools. “It was the most wonderful experience.”

Actuarially speaking, covering wars and conflicts is not a good move. Robert Kapa, whose photos from Omaha beach were the basis of Spielberg’s *Saving Private Ryan*, fell victim to a mine. Sean Flynn, the son of Eroll Flynn, disappeared in SE Asia, perhaps

killed by the Khmer Rouge. Iraq has claimed the lives of a number of journalists, including Michael Kelly, an editor of the *Atlantic Monthly*.

Bryn met his partner, the woman with whom he is shortly to have his first child, after the death of a mutual friend, a journalist, who died in an Afghanistan car crash.

“We met at the funeral, quite a traumatic experience, and something quite unexpected and beautiful came out of it,” says Bryn.

Now as a responsible father-to-be, he needs to rethink how he lives his life.

“I have to ask how do I fit in family life – which I am totally and utterly into – and still do something which isn’t a job, it’s part of who I am. Fatherhood is a scary thing.

“These last six years have been a privilege for me, a journey of experiences. I haven’t regretted



Indonesian trans-migrants. Timika, Freeport Mine, West Papua, Indonesia, 2000



Solar cells using nature's own model could change the shape of the world



The science tower building in which Professor David Officer, Director of the Nanomaterials Research Centre, has his office is typical of the energy practices and technologies of our age. The power that heats and lights the building, that powers the computers and lab equipment, has come from hundreds of kilometres distant, from the vast turbines powered by the dams of the middle North Island and the Southern Alps. Meanwhile, the most immediate source of energy, the sunlight spilling across the glass and concrete, is going to waste.

This is not the case elsewhere on campus. Waste not want not, the trees and grass are harvesting light without fuss, taking water and carbon dioxide and alchemising them into oxygen and sugar, turning the campus green with spring growth and keeping the gardeners busy.



Close to 40,000 times more power in sunshine than we use falls on the earth. What if mankind could capture solar energy with anything like the efficiency that plants manage? What if we could build solar cells with the chemistry available to plants? Clean, green, cheap, world-changingly abundant energy.

Energy is the most pressing and crucial problem confronting the world. Pressing because as we look towards a time when the world's oil production will begin to decline, the world's total power consumption is growing. In 2001 the world's consumption of power was 13 terawatts; in 2050 the best estimate of demand is 30 to 50 terawatts. Crucial, because solving the world's other problems – the matters of food, water, the environment, war and terrorism – will be that much easier if power is abundant.

The world's oil and gas reserves are dwindling. Wind, biomass, waves, dams: none of them will give

us enough power. The long-lived radioactive by-products of nuclear fission are dangerous; how to store them is a dilemma. Coal brings with it carbon dioxide emissions and global warming. Nuclear fusion is good fodder for scientific journals but nowhere near a practical proposition. Geothermal power is too expensive. As, for now, is solar power.

Silicon is the world's second most abundant element, but it must be far removed from its natural state to be used in solar cells. Solar cell-grade silicon must have less than one billionth of a percent impurities. The process of smelting, refining and distilling silicon is energy-hungry and very expensive. Most solar-grade silicon is produced as a by-product of producing still purer silicon for computer chips.

The upshot of all this is that to equip a home with enough solar cells and associated equipment to cope with a modest power demand will set you back around US\$32,000. If you suppose that the cells have a 20-year life and do the sums, you will find that going solar will not save you money, but cost you substantially more than buying power.

If you are at a distance from the national grid,

## Professor David Officer

Officer began his work synthesising porphyrins in 1990 while on sabbatical. In 1996 he and Dr Bonfantini, whose postgraduate work Officer had supervised, reported the then largest-ever synthesised porphyrin array. The paper they published was much cited.

If Officer's work with porphyrins were to lead to a commercially viable solar cell it would fulfil both his ambition and his idealism.

Small is Beautiful: Economics as if People Mattered, published in 1973, is one source of inspiration he refers to in his frequent public talks. Shumacher, the author, favoured what he called intermediate technology, based on smaller working units, co-operative ownership, and regional workplaces using local labour and resources.

Another source is Dave Irvine-Halliday, an engineer who has used rechargeable, battery-powered, white LED cluster lamps to illuminate more than 700 homes, schools and other community buildings in remote villages in Nepal, India and Sri Lanka.

A third is simply the thought that he would like his children – Officer is a devoted solo father of five – to inhabit a better world.

Officer's enthusiasm for science and solar power have turned him into something of an evangelist for both. A newspaper clipping from 1990 shows him performing science-magic before a crowd in the Palmerston North Square: hammering a nail into a plank using a banana frozen with liquid nitrogen. Another shows Officer, the impresario for the Millenium Solar Project, standing by a hilltop windfarm on the dawn of 1 January 2001 surrounded by the illustrious international solar reseachers he had brought together to welcome in the dawn (which, as it happened, was shrouded in fog. Video footage of sunrise on the Chatham Islands was used as a stand-in.)



The Millenium Solar Project greets a less-than-sunny dawn, 1 January 2000.

## The Nanomaterials Centre



From left: Yvonne Ting, PhD student; Amy Ballantyne PhD student; Mark Vigneswaran, postdoctoral fellow; Daina Grant, PhD student; Shannon Bullock, research technician; Sanjeev Gambhir, postdoctoral fellow; Professor David Officer.

Founded in July 2001, the Nanomaterials Research Centre (NRC) has a \$2 million per annum research budget, six postdoctoral fellows, nine research students and two research technicians, and 12 national and international collaborations.

The NRC specialises in functional material and nanomaterial systems. The research under way includes photovoltaic materials, batteries, carbon nanotubes and nanofibres, intelligent materials based on conducting polymers, material synthesis, surface modification, and device development.

then solar cells make sense. Not otherwise.

Silicon solar cells have other drawbacks as well. They perform poorly in the low light so often prevalent in cloudy climates, and they are rigid or semi-rigid; fine for cladding a roof, but unsuited to many applications.

So researchers like Officer and his collaborators have been pursuing a number of alternative non-silicon approaches. All of them, so far, have catches that prevent them being commercial propositions. The closest thing so far is the Grätzel cell, developed in Switzerland and named after its chief researcher.

Between two layers of glass the Grätzel cell sandwiches a layer of titanium dioxide doped with a ruthenium-based dye and a layer of a conducting liquid electrolyte. The Grätzel cell has achieved efficiencies of greater than 10 percent. It works well in low light, and titanium dioxide – a principal ingredient in white paint – is cheap. The catches: ruthenium, the main ingredient of the dye, is rare and expensive. And, a far greater problem, the liquid electrolyte is highly corrosive.

Another approach has been to sandwich two thin films of plastic together, one of them electron

rich, the other electron poor, using very much the same mechanism as used in a silicon cell. The catch: the cells are relatively inefficient – 2 percent efficiency is the best achieved so far – and must be sealed away from air and humidity to last any time. Still, if this approach worked, almost anything could wear its own solar cell, and the technology would be cheap.

All in all, nature does it so much better. And the miracle ingredient is a group of light-harvesting molecules, the best known of which is chlorophyll.

Deconstruct the architecture of a leaf and you will find molecular machines called chloroplasts. Inside the chloroplasts are closely spaced arrays or 'antennae' of 200 to 300 chlorophyll molecules. When a molecule of chlorophyll absorbs light energy, an electron is excited from a lower energy state to a higher energy state. In this higher energy state, the electron is more readily transferred to another molecule, and a chain of electron-transfer steps channels down the antenna to a reaction centre where chemicals are produced. If you were to direct those electrons to a circuit instead of a reaction centre, you would have a solar cell.

Chlorophyll belongs to a family of molecules called

the chlorins ('chloros' is Greek for 'green'), and the chlorins, in turn are part of a larger family called the porphyrins ('porphyrios' is Greek for 'purple'). Officer can make porphyrins to order. He can produce a range of colours; he can 'tune' the porphyrin to capture particular light frequencies; and, mimicking the structures within the chloroplast, he can arrange the porphyrins in arrays.

But when it comes to generating solar power, porphyrins are surrendering their promise grudgingly. Working with Grätzel, Officer has managed to link porphyrins to the semiconductor titanium dioxide. In the Grätzel solar cell this gave an efficiency of 4 percent – the best efficiency ever achieved for non-metal based dye, but well short of the 10 percent achieved with a metal-based dye. Used as an ingredient in a polymer cell, the porphyrins gave an efficiency of 0.2 percent. An encouraging result and one Officer is sure he will easily better, but nothing like the 4 percent-plus efficiency necessary for a commercial prototype.

Officer thinks the solution might be to maximise the contact area between the two polymer layers: the electron-rich layer, and the electron-poor. In



## Thinking small nanotech becomes hot

There are measures that are truly difficult to comprehend and a nanometre – a billionth of a metre or  $10^9$  – is one. Think of the measure, if it helps, as 80,000th the width of a human hair.

Another way of thinking about nanometres is that this is the smallest scale at which things can be constructed. If you go much smaller and move the constituent parts of atoms then you will actually be fulfilling the alchemist's dream of transmuting one element to another.

So small are objects at the nanometre scale that the wavelength of visible light is too coarse to view them.

The art of building structures whose features are less than 100 nanometres in size is termed nanotechnology. Because the only point of definition is size, nanotechnology embraces a vast number of disciplines and applications. However, approaches to fabricating nanotechnology can be divided into two: top down, which carves away or adds molecules to a surface; and bottom up, which has molecules self-assemble into useful structures by using carefully controlled chemical reactions.

The allure is easy to see. Nanotechnology will bring us information storage devices many times more compact than those of today (on their way); quantum computers, tiny and incredibly powerful (and some way away yet); thin flexible displays; small, cheap-to-launch satellites; and medical technologies that will work at the molecular and cellular level, killing cancer, removing blockages and delivering drugs precisely. And, because it is so precise, nanotechnology will lead to manufacturing without waste.

Some believers – those most given to Jules Verne-ish fantasising – imagine a time when nanobots will make shoes, ships and other nanobots; even, given a supply of organic material such as grass, produce the steak for your plate. There is an attendant dystopian nightmare as well: grey goo, a mass of self-replicating, all-devouring nanobots. Fortunately most of those involved in nanotechnology, while flattered by the faith placed in their abilities, believe there's no danger of this yet. You simply can't manipulate objects at the nanoscale as you would when dealing with herds of molecules. Molecules stick to one another or refuse to bond, according to their chemistry. Proteins twist. Electricity is conducted in quantum increments.

Although nanotechnology was presaged as far back as 1959 in a talk by Richard Feynman to Caltech, and the scanning tunnelling microscope enabling scientists to 'see' individual atoms was invented in 1981, nanotechnology as a defined area of research rose to prominence only in the late 1990s. Its official arrival was marked by the Clinton administration's year 2000 announcement of the National Nanotechnology Initiative.

When will we begin to see fruits of all this research? Officer predicts that numbers of new nano-enabled technologies will begin to enter our lives from 2010 on.

# Unto the Third and Fourth Generation



Expectant mothers beware. What you eat now could affect not just the health of your children, but also that of your grandchildren and great grandchildren.

The latest research from around the world – admittedly only on mice so far – suggests that the level of nutrients females receive during pregnancy may influence the physical traits and health of their offspring for a generation, and possibly for generations beyond.

Confirming or disproving this finding is the intention of one of the first projects for the National Centre for

Growth and Development, one of the Government's new Centres of Research Excellence. The Centre brings together the animal genetics and reproduction science at Massey University and AgResearch with the human genetics expertise at the Otago Medical School and Auckland University, the Centre's host. Massey will conduct its studies using sheep, but there will also be human epidemiological studies.

The Massey effort is being led by Professor of Animal Science Hugh Blair. An animal geneticist who specialises in improving the performance of a range of animals, from sheep and dogs, to fish, Blair says while the research has the potential to have major impacts on our agricultural productivity, not to mention the health of our society, he is equally excited about the opportunity to collaborate with the medical schools and AgResearch. "The CoREs are all about encouraging relationships between groups that might not otherwise





get together. There will be spin-off collaborations across boundaries that never would have occurred otherwise. Linkages will be created for research beyond the life of the CoRE.”

Twelve staff from the Institute of Veterinary and Animal Biomedical Sciences and the Institute of Food Nutrition and Human Health will contribute towards the CoRE, whose core business will be the emerging field of science, epigenetics (see sidebar).

The Massey researchers will study how nutritional stress on pregnant ewes affects the growth and performance of their lambs. The human research teams will focus on understanding how what a mother eats during pregnancy can affect her baby. The results with mice suggest poor nutrition can

lead to premature birth and low birth weights. It also appears to have transgenerational effects, leading to a susceptibility to heart disease and diabetes in the offspring when they are adults, and low birthweights in their children. However, it's improving the survivability of newborns that is the immediate focus.

For Blair, confirmation that some form of manipulation in the diet of the mother could force a transgenerational change has huge implications for farming.

“If the hypothesis is correct, New Zealand farmers have been managing their assets, their stock, wrong for centuries.”

Traditionally over the harsh winter months when feed is scarce, ewes are run on limited feed. This is

because, of all farm stock, ewes are seen to be the least affected by this regime. “This technique may be causing long-term damage – not only to the potential performance of the immediate offspring but also to that of their progeny. It may be impossible for farmers to change their overall management. But we might be able to identify times when certain levels of feed should be given achieve to optimum results.”

Massey has already embarked upon its first trials. A high growth rate Suffolk ram has been mated with a mob of small-body-weight Cheviot ewes and the lambs will be born this spring. Blair says there is reasonable evidence in the scientific literature that a small female will depress the weight of her foetus so that she can give birth more easily. “We want to test how that happens. Will a Cheviot ewe with a Suffolk lamb inside her suppress the weight of her foetus, and, if she does, how does she do it? We will have a ready-made model to identify what mechanisms can be used to suppress the size of a foetus. The size is determined by how much nutrition is transferred across the placenta. But who dictates this? The ewe or the lamb?”

There were famous experiments in the 1930s where a Shetland pony was crossed with a Shire horse but no one has unravelled how the mother ensures both she and her offspring survive. Blair says, until now, there hasn't been a need. But as real returns erode, farmers want to make production gains to maintain profit. The percentage of lambs per ewe that survive to weaning is an obvious result to focus on. Stud breeders are achieving 200 percent in their flocks and the national average last year for commercial farmers was a record 123 percent, but these percentages hide the fact that many farmers are achieving less than one lamb per ewe.

Research, much of it from Massey, has shown that lambs with low birthweights have lower survivability and growth rates. The rodent research shows that those that do survive could be passing this weakness on to their offspring. Identify what triggers low birthweights and we could discover how to ‘turn on

## Epigenetics

Epigenetics is a relatively new field of science, though researchers have long puzzled over how genetic traits that aren't explained by changes in the DNA sequence can be passed on. Dutch women who went hungry during the Second World War who gave birth to underweight children, who in turn gave birth to small children, provided the first evidence that nurture could influence nature – and that nature could be passed down the generations. Research recently published in *New Scientist* by Randy Jirtle, of Duke University Medical Center in North Carolina, provides the latest. His team found a link between diet and coat colour in mice. By giving female mice extra doses of four common nutrients during pregnancy the

researchers were able to influence the coat colour of the offspring – who were also less prone to obesity and diabetes than genetically identical mice whose mothers had not been given supplements.

Researchers hypothesise that this odd form of inheritance could be caused by adding tags, called methyl groups, to DNA. These tags result in chemical changes (methylation) in the DNA that can switch off a gene without altering the underlying sequence. It's possible these methyl tags can then be passed on to future generations. It has been shown in mice that various factors can trigger the chemical change, from certain drugs to viral infections. Jirtle's work would appear to indicate that diet can also affect methylation. However, in mice, coat colour is determined by a particular, unusual, gene, which is linked to other aspects of metabolism. The question now is: is there an equivalent in humans and in sheep?

# Surveys in the

**Lies, damned lies and questionable surveys. Not all surveys are to be trusted. Professor Janet Hoek can tell you which ones can.**

Who has the right to use the name Budweiser? Does it belong exclusively to the American brewery that began making a beer of that name in 1876, or can it be used by, let us say, the Czech brewery, Budejovický Budvar, to sell its own Budweiser Budvar?

The American brewery knew where it stood. From the 1990s, country by country, it launched a series of suits against Budejovický Budvar over trademark confusion, and among the evidence it presented in New Zealand was a survey.

Call expert witness Professor Janet Hoek.

In legal cases involving intellectual property or trademarks, the use of surveys has become commonplace. How easily can one trademark be confused with another? A consumer survey should say. However surveys, like witnesses, are not all to be trusted, says Hoek.

And Budweiser's survey was, in Hoek's opinion, a survey not to be relied on: flawed in its methodology, in the wording of its questions, in its design and its administration. The respondents said they had been almost harassed into the 'correct' responses.

"Survey evidence used to be considered hearsay, as the respondents weren't available to be cross-examined," says Hoek.

"The use of surveys seems to be increasing, but a lot of the evidence adduced shouldn't be given much weight because of flaws in the way the surveys have been designed or conducted."

Recently Hoek and her colleague Professor Phil Gendall (who is also often called on as an expert witness) were commissioned by the New Zealand Law Foundation to examine the use of survey evidence in intellectual property litigation. The nearly \$40,000 grant will go toward developing a series of guidelines to be used when commissioning and reviewing survey evidence in intellectual property cases.

With Hoek often being called on to critique other people's survey methods, she is very careful with her own.

The direct-to-consumer advertising (DTCA) of prescription drugs is a practice only found in the USA and in New Zealand, where it became legal in 1981. It is DTCA that brings you word of those

best-selling products that help you lose weight, control asthma, keep hair, and address problems of a personal nature.

Whether DTCA should be legal is contentious. While drug companies and free market advocates naturally favour DTCA, others are less certain. "One of the arguments about DTCA is that it is promoting new, expensive medication when there are cheaper generic drugs available," says Hoek, "and there is also concern that people are self-prescribing."

Hoek and Gendall carried out a major survey of the New Zealand public's views on DTCA. "Our mail survey of the general public achieved a 64 percent response rate and resulted in a sample of over 600 respondents that was carefully drawn to ensure it properly reflected the New Zealand adult population. The findings reveal that, when asked if DTCA should be banned, nearly 70 percent opposed or strongly opposed this proposition, and only 11 percent supported or strongly supported it."

Many of the respondents were very aware of DTCA, says Hoek, particularly the television advertising.

"This awareness indicates the pervasiveness of DTCA and its potential to affect consumer behaviour."

However – a point in favour of greater regulation – the survey also revealed that consumers were much more likely to recall seeing details of medicine benefits than they were the risk or side-effect information."

In New Zealand the small-print is very small, and voice-over warnings are swamped by cleverly constructed images of happy, healthy consumers. This imbalance, says Hoek, poses a public risk.

"The trouble with most New Zealand advertising is that it is not always balanced. There is frequently a



## HOW TO STEAL A COMPETITOR'S THUNDER

One of Hoek's professional interests is ambush marketing. Described in a popular marketing journal as "a parasitic activity that encroaches on legitimate sponsorship", ambush marketing is where a firm engages in promotions that invade a rival's sponsorship. During the 1996 Atlanta Olympics, Nike ambushed Reebok, the official sponsor, by purchasing prominent billboard space overlooking Atlanta's Olympic Park.

Although ambushing is commercially irritating for the 'ambushed', this type of marketing typically obeys fair-trading legislation and can be defended as legitimate competitive behaviour, says Hoek.

"I don't think the question of whether ambushing is ethical is as important as the question of what activities competitors can legally engage in. If they can buy advertising rights to events that a rival sponsors, there is nothing illegal in their advertising. I think contracts need to be much more clearly defined and sponsorship rights need to be better co-ordinated to ensure loopholes are eliminated as far as possible."

Ambush signage – or the New Zealand Rugby Union's failure to promise a stadium free of it – can be blamed for New Zealand's loss of co-hosting rights to the 2003 Rugby World Cup.

The Atlanta Olympics when Nike ambushed Reebok also saw Hoek summoned to court as an expert witness. Fresh to New Zealand's communications market, BellSouth, a sponsor

lack of information about side effects, the cost and the risks."

In comparison, DTCA in the USA features a mass of detail – a full-page advertisement is often accompanied with another full page of information. Professor Hoek is currently working with a researcher at the University of Oregon, comparing advertising

## A CATALOGUE OF ERRORS

**Coverage error** occurs when the sample doesn't represent a microcosm of the population of interest.

In the case of Budweiser vs Budejovicky Budvar, the survey failed to define particular segments of drinkers within the beer marketplace, an important oversight because the beers involved were premium-priced imported packaged beers (ie, belonging to a niche market).

**Measurement error** occurs when questions don't measure the particular issue. Push polling, where people are told negative information about a candidate before being polled, is an example of measurement error that can lead to biased estimates.

The Bud vs Bud survey featured four measurement flaws relating to the design of the survey, the administration of the survey and the interviewers' qualifications and conduct.

**Sampling error** depends on the size of the sample and the sampling technique used (the bigger the sample, the smaller the margin of error and the more precise the estimates).

The Budweiser researchers overlooked the important question of whether the estimates were unbiased. Of those classified as confused between the two brands, less than a quarter had consumed or purchased 'European' packaged beer within the past three months and many fewer still had purchased or consumed premium-priced imported beers, suggesting that the evidence of 'confusion' was based on the responses of people who were unfamiliar with the market partition.

**Non-response error** occurs when the people who don't answer a survey differ from those who do. Because they haven't answered, it's very hard to know when this affects the estimates obtained, which is why surveyors aim at a high response rate, to minimise the likelihood that NR error will seriously affect the estimates obtained.

The survey response rate was a source of contention in the Bud vs Bud case; the calculation presented bore no relationship to any standard response rate formula and was clearly inaccurate.

## An entrepreneurial expert

**If you think of entrepreneurship, you probably think of individuals. Say Richard Branson, now in New Zealand with Virgin Blue, Annita Roddick of the Body Shop or, more locally, Dick Hubbard or Stephen Tindall. Here they are, swashbuckling forth, toppling the status quo, creating wealth and opportunities and providing us, along the way, with superior products and services. We should, we feel, be more like them.**

As a culture we are newly in love with entrepreneurship, with the idea of being entrepreneurs. But while there are plenty of puff-piece magazine stories and biographies lionising individual entrepreneurs, plenty of 'how to' and motivational books, there's very little published empirical and theoretical research into entrepreneurship or the conditions that foster it. This is a shame, for if we don't understand entrepreneurship, how can we encourage it?

If there is a person who knows the state of research into entrepreneurship in New Zealand better than anyone else, it must be Albany-based Professor Anne de Bruin, who with her colleague, Ann Dupuis, is the co-editor of the recently published *Entrepreneurship: New Perspectives in a Global Age*. Two of the chapters in this twelve-chapter, densely-referenced, academic text have been authored by de Bruin, and she has co-authored another eight.

What makes for an entrepreneur? The answer you give may be a clue to where you are from. In New Zealand, Australia and Britain entrepreneurs are seen as being distinctively innovative, opportunistic and risk-taking; in America and Canada the view is more that anyone in small business is an entrepreneur.

The book nicely skirts the problem by defining entrepreneurship as a continuum. Branson sits on the continuum, but then so does the woman selling clothes at the Otara fleamarket. The book also adopts an approach of 'embeddedness': placing the entrepreneurial activity within the context of the surrounding social environment.

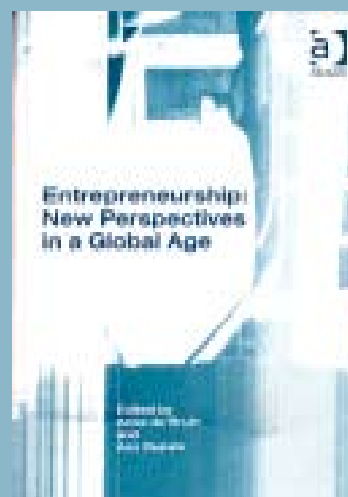
The book has chapters on familial entrepreneurship, indigenous entrepreneurship, youth entrepreneurship, ethical entrepreneurship and community entrepreneurship. Of particular relevance, given the rapidly-ageing profile of New Zealand's population, is a chapter on elder entrepreneurship. In the Netherlands and the UK 10 percent of people starting new businesses have been found to be age 50 and over. Hearteningly, these businesses have good survival rates: they are three times more likely to survive than businesses started by people in their teens or twenties.

Entrepreneurship can also be a part of government, both local and central. Just as the private sector can use resources in new ways to maximise productivity and efficiency, so too can the public sector. *Entrepreneurship: New Perspectives in a Global Age* has chapters on Municipal-Community Entrepreneurship and State Entrepreneurship.

In the latter, de Bruin proposes that the term welfare state no longer properly describes the function of the state in the global age and that a new term, the 'strategic state', should be employed. The strategic state acts entrepreneurially, and exhibits opportunity-related strategic behaviour.

You can find expressions of the strategic state in Industry New Zealand, in the Ministry of Economic Development, in aspects of the Tertiary Education Commission and most explicitly in the 2002 policy framework, *Growing an Innovative New Zealand*, which sees the state assuming leadership in strategies for economic development that are based on fostering an effective innovation culture.

It seems entrepreneurship, far from being the province of the elite few, is



AFTER EIGHT YEARS AS HEADMASTER AT WANGANUI COLLEGIATE, JONATHAN HENSMAN IS MOVING ON TO BECOME HEADMASTER OF BRISBANE'S ANGLICAN CHURCH GRAMMAR SCHOOL, AN INDEPENDENT BOYS' SCHOOL. ON THE EVE OF HIS DEPARTURE HE SPEAKS WITH MASSEY ABOUT PRIVATE SCHOOLS, THE DIFFERENCE BETWEEN SINGLE-SEX AND CO-ED, AND WHAT'S HAPPENING IN NEW ZEALAND EDUCATION.

# Meet the teacher



In a shirt that makes him look like a New York stockbroker, sitting upright in his leather armchair in his spacious office at Wanganui Collegiate, Jonathan Hensman looks every inch the private school boy he isn't.

provide a large number of sports teams, debating teams, drama, choir, music and so on because a lot of the staff no longer want to participate beyond 3.30 in the afternoon."

What of the benefits of having your children mix with others whose circumstances are different? When Hensman moved his own children from Mt Albert Grammar to Collegiate he worried about the narrowing of experience that might come with moving from a large, inner-city, cosmopolitan state school to what was perceived to be a wealthy and mono-cultural school. "That bothered me, given my state roots. But now I know what I would choose for my children within a flicker of a second.

"I think the reality is that when our young people leave school they slot themselves into their own socio-economic grouping anyway by virtue of the jobs they take up. All we're doing here is funnelling them into what people would funnel into anyway."

The only time he has seen the state school system challenging the advantages of independent schools was after the introduction of Tomorrow's Schools in 1987, which allowed good state schools to establish a degree of autonomy. For a few years the gap closed between the education outcomes of state and independent schools, he says. "But I believe that gap is now as wide as it's been for a long time."

Indirectly it may have been Tomorrow's Schools that turned Collegiate co-ed. In the late 1980s Collegiate's roll fell: a state of affairs Hensman attributes to newly competitive state schools. Collegiate, which had been a boys-only school, responded by admitting senior girls. In 1999 the school started admitting girls from Form 3, and it is now co-ed across all year groups, with girls making up 38 percent of the total roll.

Are the pupils better off for the school having become co-ed? For parents who are wondering whether a single-sex or co-ed schools is the right choice for their child, Hensman is non-prescriptive. The choice has to fit the individual child, their needs and their family background. However Hensman, who has spent equal time teaching in single-sex and co-ed schools, does make a spirited case for boys' schools.

Educated at Karamu High School in Hastings, a state co-ed, Hensman spent many years teaching in the state system before making the leap from decile 2, co-ed Mt Albert Grammar School, where he had spent four years as Deputy Head, to exclusive, decile 10 Wanganui Collegiate in 1995. Before the move to Wanganui he had reservations about the advantages of a private school education. He's now well and truly sold on it.

"The purpose of education is not only the development of the mind, but the development of character – and this is what independent schools do extremely well," says Hensman.

Independent schools address the whole person in a way most state schools cannot, he continues. "A big problem for state schools is that they just can't

## GOING PRIVATE

As at 1 July 2002 there were 110 private fully registered and provisionally registered schools. Collectively these had 27,592 pupils. New Zealand's total roll was 748,084.



He suspects many parents do not understand how different the cultures in boys and co-ed schools are. "Young people are now surrounded by a world that has a values system that is very individual, so the concept of collectivity and community is less pronounced than it was. That's why some young men are better in boys' schools, where there's more collectivity and esprit de corps – generally through sport. They are advantaged by experiencing that common purpose.

"I have seen higher behavioural expectations and norms of behaviour in single-sex environments than in co-ed environments."

If Wanganui Collegiate wins an exemption from his observation – as it does – then this is because it has maintained its boys' school traditions.

Whether the school is state or private, single-sex or co-ed, Hensman believes there are three factors that determine its success.

One is the quality of the Head and his or her value system. A second – and not one state schools have much say in – is the socio-economic environment the children inhabit outside of school. "If kids aren't getting support from home, they face an uphill battle. Parents are base one, and our life's circumstances put us on that base."

In high decile schools the children share similar backgrounds and similar expectations, one them being university.

The third factor is having quality teaching staff who are passionate about kids. Not passionate about their subject, he stresses, but passionate about kids. Passionate enough to give the job the time it needs to be done well.

New Zealand needs to attract more people into teaching. The simple solution, he says, would be to go back to the studentship system. "But the Government won't buy into that.

"We also need to pay good teachers more. For the 50 percent or so of teachers who don't bother to work after school and weekends to take sports teams or drama productions, the present salary is adequate. But those who do get out after school and get involved should be paid more," he says.

"It would be so easy to do and is a small price to pay for what you get out of it. It would reduce juvenile crime and improve adolescent behaviour across our communities."

## Hensman on the NCEA

Hensman likes the concept of ongoing assessment, while still assessing at least 50 percent of each subject by exam (except practical subjects).

He also looks forward to NZQA data telling schools a lot more about how well its students and teachers are doing. Rather than having one mark for a subject like maths, under the NCEA the subject is broken down into six or seven achievement standards, so areas of learning within a subject can be analysed. "We're told a lot more and that's a very good thing," says Hensman, though he goes on to say that the same thing could be achieved using marks.

What he most dislikes about the NCEA is the marking regime. It is too formulaic and it lacks finer definition. "There are only three delineations for a pass, whereas in the old days there were 50 – from 51 to 100 percent."

He is also concerned about the distinction between the NCEA's unit standards and achievement standards, both of which give students credits. "When I read in the paper the other day that Cambridge High School was giving students unit standards for picking up litter and that can go on their record of learning, I couldn't believe it.

"You really do have to sit up and listen to the critics of NCEA who are saying that some of the unit standards are so vocational in nature that it's almost worthy of having a different system for them."

Those who are enthusiastic about NCEA love it because it's an integrated package which can accommodate all learners, he says. But in some ways the unit standard system is a dumbing down because you can get it for hairdressing, playing with engines, maybe picking up litter or putting up a fence.

"There are two arms of learning: vocational and academic. But with NCEA the credits for each are being recorded on the same statement of performance. I think it would have been sensible to be honest with ourselves and accepted there is a hierarchy of learning and the path you take should reflect your ability level. That's life, so why be ashamed of that?

"It's not right for a school to say we achieved all these credits and on the league tables we look fantastic, when it's largely driven through unit standards rather than achievement standards. That's where I have a real problem with NCEA."

Jonathan Hensman began his teaching career at Hastings Boys' High School, leaving at the end of 1986 as head of the department of geography. After a year at Tamatea High School in Napier as head of the department of geography, history and social studies, Hensman moved in 1988 to what he describes as a "very middle management position" at Hillcrest High School in Hamilton as head of the social science faculty. Three years later he was appointed Deputy Head at Auckland's Mt Albert Grammar School.

Outside the classroom, Hensman has coached a variety of sports teams, has been chief examiner for School Certificate geography and, along with his brother, has written most of the senior school geography text books in use today. In 1994, in his capacity as Deputy Headmaster at Mt Albert Grammar, he was awarded a Woolf Fisher Scholarship for outstanding service to education.

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## Backbeat Project

Johnny Lippiett

Jazz saxophonist Johnny Lippiett, the drive behind the Backbeat Project CD, traces his musical journey back to church: a Pentecostal church near his childhood home in Portsmouth, England to be exact. "They had these amazing singers and musicians up there on stage, and the whole place was going off like it was some Baptist church in the deep south. The first band I ever joined was a church band, simply because of the energy, the way gospel comes straight from the heart," he says.

From gospel he went to rhythm and blues. Clapton, Page and Hendrix became his idols. But jazz lay in wait: his father was a collector of bebop and "one day he took me to see this American big band playing a tribute to Stan Kenton, and man, I was in awe, watching this hot saxophone section going off right in front of me... and then I got given this Muddy Waters album for my tenth birthday, and that was it dude, I was gone." At school Lippiett was one of the three boys in his class keen on improvisation. "Here we were, wanting to learn how to wail on our instruments, and our teacher used to say 'well, you boys go in the music cupboard, and I'll see you at the end of the lesson'."

Lippiett went on to study jazz. He was a finalist in the Young Jazz Musician of the Year competition. He toured in support of jazz luminary Courtney Pine, winning plaudits from the Independent as "one of the most exciting and original new voices to be emerging onto the jazz scene." He played in Montreal, New York and London, which is where he and his band were based when he met Wairarapa-born Phoebe Thorp. Which is how he came to holiday in New Zealand and to meet jazz lecturers Paul Dyne and Roger Sellers. Which is how he became a tutor at the Conservatorium. "The three of us instantly hit it off. Roger had been a resident at Ronnie Scott's in London, so we had much in common," says Lippiett.

For those who know their jazz sub-genres, the Backbeat Project is probably best defined as 70s funk. This may not please traditional Winton Marsalis jazz purists, but Lippiett is unrepentant. "I've done the straight jazz albums, and my granny still loves them, but no one my age is listening to this stuff. So Phoebe said, 'Why don't you make an album so my girlfriends and I can come and support you at your gigs?' I thought about it and said 'Why not?' There's still some challenging jazz harmony in there, I've just put it in a different frame."

The Backbeat Project was recorded live at the Conservatorium by Richard Caigou. An alumnus, Ben Wilcox, plays the Fender Rhodes; a student, Deva Mahal (daughter of Taj), sings on two tracks; a drum tutor, Lance Phillips, is percussion; a former lecturer, Noel Clayton, plays guitar; and a postgraduate student, Manny Abrahams, who leads the Whitirea music programme, is on bass.



## Sleep in the 24-hour society

Philippa Gander

How do dolphins and other marine mammals that must periodically surface to breathe manage to sleep? The answer is that they have the ability to have one half of their brain asleep at a time.

It is sometimes light-heartedly suggested to Professor Philippa Gander that this might be a good stratagem for our own time-pressured species. While Gander is not so sure about living half awake, she can see why the suggestion might be made.

Surveys have shown 37 percent of New Zealanders to be sleep deprived, and one in four has a chronic sleep problem lasting more than six months. Yet sleep, an activity that occupies one third of our lives, has not had that much attention.

No longer. Sleep in the 24-hour Society is accessible and comprehensive, exploring sleep in its many aspects. There could be few authors better qualified to write about the topic than Gander, who spent a number of years working at the NASA Ames Research Centre in the Crew Flight Fatigue and Jet Lag Program and now heads the Sleep/Wake Centre.



## Kaimai Crash: New Zealand's Worst Internal Air Disaster

Richard Waugh

### Taking Off: Pioneering Small Airlines of New Zealand 1945-1970

Richard Waugh with Bruce Gavin,  
Peter Layne and Graeme McConnell

On the morning of 3 July 1963, a day of thick cloud and driving rain, workers at the Gordon quarry, hard alongside the Kaimai ranges, heard an aircraft engine drone overhead then stop abruptly. They phoned the Matamata Police, who called the Tauranga control tower, which had lost contact with ZK-AYZ, a DC-3 carrying three crew and 20 passengers. The plane had flown into a bushed hillside in the Kaimai Range, close by Matamata. There were no survivors.

Kaimai Crash: New Zealand's Worst Internal Air Disaster documents the loss of ZK-AYZ, the passengers and crew it carried, the rescue operation – which made good use of helicopters – and the court of inquiry that followed.

The next fatal accident of a scheduled airliner on New Zealand soil would not be for another 20 years. This book and a roadside memorial at Gordon unveiled on 3 July 2003 mark an event still strong in living memory, both of the search and rescue men and women and of the friends and relatives of the dead.

ZK-AYZ was owned and operated by NAC, the National Airways Corporation of New Zealand, but post war there were also a host of small airlines doing whatever they could to stay in business and flying a plane-spotter's delight of small aircraft. Taking Off: Pioneering Small Airlines of New Zealand 1945-1970 is a comprehensive – 200 pages with many photos and illustrations – look at the eventful history of these airlines and the resourceful and adventurous individuals who ran them.

Alumnus Richard Waugh, whose father was a pilot, has written prolifically about New Zealand aviation history. He is also an ordained minister.

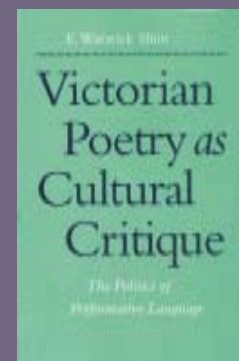


## Victorian Poetry as Cultural Critique

Warwick Slinn

If poetry reflects cultural processes, including the politics of its time, what should we make of:

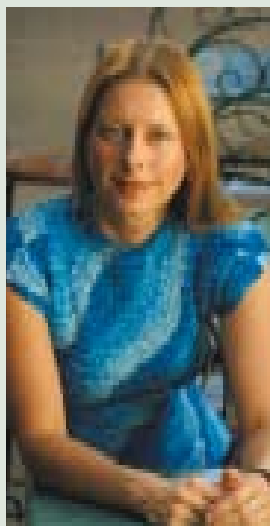
Some ways can be trodden back,  
But never our way,  
We who one wild day  
Have given goodbye to what in our deep hearts  
The lowest woman still holds best in life,  
Good name.



The excerpt is from Augusta Webster's 1870 monologue dramatising the private reflections of a courtesan. It is one example cited by Professor Warwick Slinn in his new book, Victorian Poetry as Cultural Critique: On the politics of literary language.

The book focuses on Victorian writing but it has far broader aims and was developed in response to the tendency of recent cultural studies to neglect poetic language. The argument is that if we are to understand fully the function of figurative language in cultural processes, we need to devote serious attention to that language. The poems selected for analysis address social issues such as slavery, sexual politics, prostitution, consciousness, agency, aestheticism, religious faith and philosophical idealism.

The book is part of a series on Victorian literature and culture produced by the University of Virginia Press, which receives a high academic profile in North America. Professor Slinn is Head of the School of English and Media Studies.



**Shelley O'Dwyer**

'We want more' has been the message from our alumni reunions and events this year. The desire to get together, reminisce, socialise, network, renew friendships and generally have a good catch up has been evident in the great response we have had to our Alumni and Friends events to date, especially our now-legendary get-together at the Mystery Creek Fieldays and the Wellington Campus Alumni and Friends After-Fives event. And there will be more! Two more Alumni and Friends events will take place at the Albany and Palmerston North campuses before the end of 2003, as well as a host of subject specific reunions and get-togethers.

The common thread running strongly through the events we've held this year is the pride our alumni feel in belonging to the Massey family. This is an ongoing and developing association, and a very human one – it is the friends we welcome back, share stories with, farewell, and meet again that is at the heart of our affinity with Massey.

Our affinity with the Massey family was also celebrated with the award of our Massey University Affinity Card Scholarships to five postgraduate students in June. The scholarship winners, chosen from various disciplines for their academic achievements, were: Carl Bates, Shay Rutherford, Maree Langford, Frankie Rouse and Briar Rowley. The Affinity Card Scholarship is funded through the Massey University Visa, a Westpac credit card. If you use the MU Visa, then Westpac Visa will donate a minimum of \$10 per annum to the scholarship fund. If you have interest-earning balance on your card then the donation could be more – and this will not cost you anything. The Massey University Visa is a way of expressing a connection with Massey, a reflection of achievements and a unique way to help alumni gain postgraduate qualifications while costing no more than an ordinary credit card – plus you enjoy a lower interest rate and access to hotpoints to gain a wide range of great rewards including Air New Zealand Airpoints. Call us for an application form on 06 350 5865 or download an application form at <http://alumni.massey.ac.nz>

We want to build on this year's successes and gather together as Alumni and Friends more often next year, so keep us informed of your news and current address by completing and returning a 'Keep us Posted' form. You'll find the form in every edition of MASSEY or at <http://alumni.massey.ac.nz>

Alumni are also gathering as supporters of the new Massey University Foundation. The Foundation exists to provide funding for projects designed to enhance the experience of Massey students. Watch out for the Foundation – coming to a town near you!

**Shelley O'Dwyer**  
Alumni and Friends Manager



## Alumni and Friends Events 2004

These details are provisional and should be confirmed well ahead with the Office of Development and Alumni. Contact [alumni@massey.ac.nz](mailto:alumni@massey.ac.nz)

Current information can be found on the alumni web site: <http://alumni.massey.ac.nz>

- 22-24 April** Albany Graduation
- 10-14 May** Palmerston North Graduation
- 24-25 May** Wellington Graduation
- 4-5 June** Massey Agricultural College/Massey University Rugby Football Club 75th Jubilee Celebrations, Palmerston North
- 17 June** Alumni and Friends function, Mystery Creek Fieldays, 5:00pm-7:00pm, BNZ marquee, Fieldays, Hamilton
- August** Alumni and Friends After Five function, Wellington campus, 5:30pm-7:30pm, Great Hall, Museum Building
- October** Alumni and Friends After Five function, Albany campus, 5:30pm-7:30pm, Round Room
- 26 November** Palmerston North Graduation
- 3 December** Alumni and Friends After Five function, Palmerston North campus, 5:30pm-7:30pm

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this one speaks volumes**



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## Diploma of Agriculture, class of 1953/54

Diploma of Agriculture, class of 1953/54, marked their 50th anniversary with a two-day reunion held at the Donhur Motor Inn in Tauranga earlier this year.

Around 15 ex-Massey students attended with their partners, to celebrate the half-century and to remember those who could not be there to share the moment.

The reunion included a coach tour that circled many of Tauranga's developments. A "chilly but quite pleasant" stroll through the gardens was followed by a spot of lunch. While some spent time looking around the kiwifruit museum, others almost needed dragging out of the car museum. Although the day's activities left many weary, there was still time to talk. "You would think that after all this time we'd run out of things to say, but no, lots of reminiscing, lots of gossiping," said organiser Peter Dalley.

The reunion was also attended by "a couple of ring-ins", some sheep farmers, who tagged along. "We're not cliquey, we'll accept anybody," laughed Mr Dalley. "We had a marvellous dinner and it was mandatory for everyone around the table to tell a tall tale, a joke, or a light hearted story", he said.

"Massey was a great place to study back in 53/54. There were roughly 260 staff and students on campus", said Mr Dalley. "It had a real family atmosphere. There was still the 'them' and 'us', but it was a great place to be."

Of the 260 staff and students, the two-year Dairy Diploma course had approximately 24 students in the first year. However, numbers tapered off in the second year with a maximum of 15 students attending.

"We have regular reunions," said Mr Dalley. "Whenever the fancy takes someone they say 'let's have a reunion' and we get into it and organise another one. We had a big one, 40 years, up at Massey a while back.

"This reunion was a humungous job to organise. Still, it wasn't very hard to get hold of individual people as I've kept a list of names and contact details updated over the years", he said. "We try to keep in touch.

"Of all of the reunions over the years, and I can remember five, it always rains. Just like clockwork, in Tauranga, it rained there too. So if you want a drought broken, give us a call."

## Diploma of Agriculture, class of 1949/50

Ex-Massey University students of the Diploma of Agriculture, and their partners, descended on Taupo earlier this year to enjoy their fourth class of 49/50, reunion.

About 40 people gathered at the Spa Hotel/Motel complex to swap stories and reminisce over their Massey days. Organiser, Spencer Jones, was amazed at the level of camaraderie among the old classmates as they arrived, describing the moment as "fantastic" and "marvellous".

The activities over the three-day event included a visit to the dairy farm of another ex-Massey student, sailing on the lake, and a spot of shopping for some of the partners. A semi-formal dinner was followed by a recounting of each other's life adventures.

Organising the reunion took Mr Jones and his wife Jenny around 12 months.

"There were roughly 40 members in our original class", said Mr Jones. "Finding our old classmates was not always easy. You see, sometimes members of the group move around and don't tell you where they are. It takes a bit to track them down. It's a matter of finding someone who knows where they've gone", he said. "I have an address list which I use as a base, but sometimes people disappear and it takes a while to locate them again."

The reunion was held during the week. "Everyone is retired now, so we didn't see the need to have it go over the weekend", said Mr Jones. "The one thing everyone at the reunion reiterated is how everyone's years as a student at Massey were informative and most enjoyable," he said.



Back row: Jan Gribble, Phillippa Baird, Judy Rolfe, Lewis Gibson, Clare Holst, Diane Young; Third row: Mike Gribble, Rod Baird, Edwin Rolfe, Jules Holst, Ian Young, Bill Brett; Second row: Gill Welch, Liz Gusscott, Christine Bygrave, Gloria Morriss, Barbara Warin; Front row: Mick Welch, David Gusscott, Bill Bygrave, Clyde Morriss, Dawson Warin.



Back row: Mick Welch, Lewis Gibson, Edwin Rolfe, Jules Holst, Ian Young, Bill Brett. Front: Rod Baird, Mike Gribble, David Gusscott, Bill Bygrave, Clyde Morriss, Dawson Warin.



Christine Bygrave, David Gusscott, Liz Gusscott, Bill Bygrave, Gill Welch

## Diploma of Agriculture (Dairying), Class of 59/60

When Mike Gribble rang a friend to see if he was attending Massey's 75th Anniversary, little did he know he was about to organise the Diploma of Agriculture (Dairying), class of 59/60, reunion instead.

"I rang a cobbler to ask him if he was going down to the celebrations and he said he would if some of our class went too. As it was only two weeks before the 75th there was not enough time to contact all our class – so we did our own", said Mr Gribble.

Hosted at Hamilton's Quality Inn, around 14 Massey alumni arrived with their partners for a chance to catch up with friends and renew old contacts. However, there was more than just 44 years to celebrate for one attendee. The anticipated arrival of a new grandchild saw this classmate make the trip partnerless.

"We had a PowerPoint presentation for the Friday night so everyone could refresh their memories, and it also put partners into the loop of what the class was all about. Everyone did a five-minute presentation on what they had been doing. I was amazed at how well everyone had done in the farming business. Of course, some had had some hard times, but overall everyone has done so well," said Mr Gribble.

A lot of research went into locating classmates and some couldn't be found. Among those absent were six students originally from Kenya, one of whom was the only woman in the class.



Back row: Johnny Hill, Graham Thomas, Phil Woodwood, Lewis Gibson, John Wardlaw, Dan Yoeman, Cyril Harding, Johnny Smeed, Mike Gribble; Third row: Rod Baird, Edwin Rolfe, Kevin Lyons, Mary Verbi, Jules Holst, Dick [unidentified]; Second row: Olie Sunde, Mick Welch, Dawson Warin, David Stutt, Clyde Morriss, Will Weatherly, Donald Prince; Front Row: Bill Bygrave, David Gusscott, RB Thomas, Bill Brett, Ian Young.

## Khon Kaen alumni function



In June 25 Massey alumni ranging in age from early 20s to late 50s gathered in Khon Kaen for an alumni function hosted by Massey with assistance from TradeNZ. It was a chance for the alumni, many now holding senior positions in Thai universities, to reminisce about their time in New Zealand.

Pat Love, the Director of the Massey University English Language Centre (MUELC), and the Centre's marketing manager, Dianne Fountaine-Cody, announced a MUELC scholarship for English-language students, and a buffet-style dinner followed.

Pat Love has been a regular visitor to Khon Kaen over the past eight years and the Language Centre has hosted many students from Khon Kaen University.

Thanks are owed to the Massey alumni who gave up their weekends to attend fairs in Vietnam and Thailand to help the Language Centre and the International Students Office promote Massey as a place to study.





Massey Agricultural College / Massey University Rugby Football Club 75th Jubilee Celebrations – Palmerston North 4th, 5th & 6th June 2004 (Queen's Birthday Weekend)

The Massey University Rugby Football Club is organising a reunion in Palmerston North during Queen's Birthday Weekend, 2004, to celebrate the 75th anniversary of the formation of the rugby club in 1929. All past and present members of the Massey University Rugby Club, rugby players, club officials and supporters are invited to attend a weekend of reminiscing and catching up with old colleagues. The major event on the programme will be the Jubilee Dinner on Saturday 4th June and other group gatherings can be organised to fit in with the scheduled current "Club Day" games.

You are invited to register your interest and possible attendance at the reunion by contacting the organising committee by mail, e-mail or via the website:

Massey University RFC 75th Jubilee  
PO Box 449, Palmerston North  
Phone: 06 357 0911  
Fax: 06 356 3006  
Email: [75th@masseyrugby.co.nz](mailto:75th@masseyrugby.co.nz)  
Web: [www.masseyrugby.co.nz](http://www.masseyrugby.co.nz)

Forms for registration will be forwarded to you when the reunion details have been finalised.

The organising committee intends to produce a full list of all students, past and present, who have played for the club's 1st XV since the first match in 1929.

It is also planning a jubilee booklet containing photos of these teams and other club events during this period. Unfortunately, some photographs that are held at Massey University have been damaged and some are missing. The club is endeavouring to obtain a complete set of all past photos, which will be kept in the Massey University Archives as a permanent record of the rugby club's activities.

The following 1st XV (Senior A) team photos are missing or damaged: 1931, 1936, 1937, 1948, 1949, 1953, 1956, 1961, 1965, 1969, 1974.

If you know of these team photos or have copies of them, please let us know. The organising committee would appreciate borrowing for a short period any of the missing photos to have copies made to complete the club's records. The club would appreciate any assistance that alumni members can give to our search. Please contact a member of the reunion organising committee.



Massey College 1949 Junior Seven-a-side Winners of the Rogers Cup: Top row: Tony Marquet, Wally Bremner (Capt), S Green (Pres), A Soper, Darryl Cotter. Bottom row: John Hegarty, George Catley, Brian Molloy (later to be an All Black). Photograph courtesy of John Hegarty who "discovered it while browsing".

### Alumni benefits

Discounts, benefits and services have been negotiated with the following businesses for Massey University alumni:

### Massey University Library

Massey University alumni are granted special borrower status with the Massey University Library. An annual payment of \$100 (which is a 50 percent discount on the normal rate) entitles alumni to the borrowing privileges of an undergraduate distance student. Books are able to be borrowed in person or sent in the post within New Zealand. Contact [alumni@massey.ac.nz](mailto:alumni@massey.ac.nz) for more information.

### Massey University Visa

If you choose the Massey University Visa, Massey automatically receives a donation of 1 percent per annum on the interest earning balance or a minimum of \$10 per annum, whichever is greater, to the Massey Affinity Card Scholarship fund. You can earn hotpoints to gain a range of great rewards including Air New Zealand Airpoints. For more information, or to get an application form, call 0800 888 111 (24 hours a day, seven days a week) or contact Massey University on 06 350 5865, or [alumni@massey.ac.nz](mailto:alumni@massey.ac.nz). You can also download the application form at <http://massey.alumni.ac.nz>

### Kanuka Grove Book and Resource Centre

Kanuka Grove supports Massey University alumni with a special discount of 10 percent on all trade items. Open Monday to Thursday from 8.30 am until 6.00 pm, Fridays 8.30 am until 5.00 pm and Saturday from 10.00 am to 2.00 pm. Kanuka Grove is available on-line for all book and resources at <http://kanukagrove.massey.ac.nz>. They are happy to respond to e-mail requests for that special title, and would love to hear from you. Kanuka Grove is New Zealand's biggest Teachers' Resource Centre, stocking a huge variety of products. These include fabulous books for children and adults alike, as well as educational resources more specifically focused for teachers and parents. Just drop them a line. Contact: Adrian Phillips, Director, Kanuka Grove, College of Education, Hokowhitu Site, Centennial Drive, Palmerston North, phone 06 3513329 fax 06 3513324.

### Career move

Massey's unique on-line career management programme is specifically designed for alumni, students and staff. The programme is provided at a special Massey rate of \$125.00 (incl. GST). This enables you to register on-line and access information about what you need to do to be a front-runner in today's job market, as well as activities that will sharpen your career management skills and accelerate your progress towards your career goals. For more information go to <http://careers.massey.ac.nz/careermove.html>

### Find a classmate

Looking for a fellow classmate, graduate or staff member? The Office of Development and Alumni has an up-to-date database containing over 50,000 names. Email, write, phone or fax us with as many details as possible and we'll help you make contact. Please note, the Office of Development and Alumni complies with the Privacy Act and will not release personal information without permission.

### Calling all Information Systems graduates!

The IS Department goes from strength to strength, and we'd like to hear about your progress in the ever-changing world of Information Systems. Let us know, with a quick email to Rachael (contact details below), where you are working, what you're up to, and any other news you think might be of interest to us. We would like to be able to include your achievements and experiences (with your permission of course!) in our departmental publicity material.

If you're ever in town you are welcome to come and visit us and let us know what you're up to, and maybe you'd like to share your experiences with the new generation of IS professionals coming through. They always appreciate hearing stories from the real world!

If you are interested in expanding your qualifications in Information Systems and want to find out about postgraduate study, please contact Rachael Carruthers, our Academic Administrator (email [R.E.Carruthers@massey.ac.nz](mailto:R.E.Carruthers@massey.ac.nz), phone (06) 350 5524) for more information.

## Queen's Birthday Honours

Seven Massey alumni were honoured in the Queen's Birthday list. Professor **Kevin O'Connor** (BAgrSc 1953) was made an Officer of the New Zealand Order of Merit. Former National Party minister **John Luxton** (BAgrSc 1970) and scientist Dr **Brian Tapper** (PhD (Sc) 1969) were awarded a Companion of the Queen's Service Order for Public Services. Dr **Edward Thew** (BEd 1983) was awarded Membership of the New Zealand Order of Merit. Three alumni in the military to receive honours were: Lt Col **Clare Bennett** (MBStudies 2001), Member of the New Zealand Order of Merit; Lt Col **Shayne Gilbert** (MPhil 2000), Member of the New Zealand Order of Merit; and Lt Col **Dean Baigent** (MPhil 2001) Officer of the New Zealand Order of Merit. **Rodger Fox** was one of two staff members from the College of Design, Fine Arts and Music to be recognised in the Queen's Birthday Honours list. He received his New Zealand Order of Merit award for services to music. Senior lecturer in Photo Media **Anne Noble** received the same honour for services to photography.



Graham Simpson completed a Master's in Agricultural Science in 1956, with the help of Dame Ella Campbell. He went on to do a PhD in Plant Physiology and Biochemistry at Wye College, London University, before going to Canada on a Post-Doctoral Fellowship, supposedly for one year. "Here I am still," he says, "after all these years!"

He became heavily involved in research in the areas of drought stress resistance and seed physiology, publishing around 120 scientific papers and two books. He was the founding Director of the Crop Development Centre at the University of Saskatchewan, now a multi-million-dollar research programme dedicated to crop breeding and improvement.

He retired in June 1999 at the age of 67 and celebrated the arrival of the new millennium by cycling alone across Canada "just for fun".



### 1937

**Ross Murray**, Bachelor of Agricultural Science 1937, worked as a shepherd on Wilanda Downs, Ohau, and then as head ploughman and teamster on a 1200-acre cropping and fat-lamb farm in central Southland before embarking on his degree. On graduating he became manager and master of a new Maori Boys' Training Farm at Te Whaiti, leaving in 1941 to join the Department of Agriculture. Ross was heavily involved with the World Ploughing Organisation. He retired in 1974.

### 1939

**Jack Wendelborn**, Diploma in Dairy Technology 1939, is now 91, still in "fairly good health", and taking an interest in genealogy. Jack spent the first 25 years of his career with Tip Top Ice Cream Company, first as factory manager in Wellington, then as a manager in Auckland. He and his wife then entered business for a few years before Jack took up semi-retirement as a shift engineer with the Bay of Islands Hospital, a 'temporary' position he held for 19 years. He has travelled extensively since retiring in 1982.

### 1953

**Peter Hildreth**, Bachelor of Agricultural Science 1953, was a New Zealand Dairy Board Consulting Officer from 1953 to 1965, then worked for FAO projects in Chile, Taiwan and Argentina from 1965 to 1971. He was with the FAO/World Bank Co-operative Programme from 1974 to 1978 and between 1979 and 1989 worked as an international consultant. From 1990 on he terms himself orchardist/livestock/semi-retired farmer.

### 1965

**Ashley Gibbs**, Bachelor of Agricultural Science 1965, will be retiring in 18 months from a career in the animal health industry. His specific focus has been pig and poultry nutrition and trace nutrients in all species.

### 1973

**Ivo Yelavich**, Diploma in Agriculture 1973, started out as a farmer and agricultural contractor, then shifted career: first to retailing electronics and music, then, for the last seven years, working as a tractor and farm machinery sales consultant. In March 2003, Ivo and his wife, Diane, moved to Brisbane after living most of their lives in Kaitiaki.

### 1974

**Donald McEwen Simpson**, Diploma in Education 1974, has retired from secondary school teaching and administration. In 1977, he and his wife, Lorna, went to teach at Jilin University in Changchun, north-eastern China, for two years as a mid-career break. In 2000 he became inaugural Chairman of the Wairapa Branch of the New Zealand-China Friendship Society. Changchun is now sister city to Masterton. Donald is a church organist, and secretary/treasurer to the Wairapa Labour Electorate Committee.

**David Glen Sinclair**, Bachelor of Science 1974, is the Asia-Pacific Regional Vice President for Bristol-Myers Squibb Technical Operations and is based in Singapore after having spent eight years on assignment in Australia and six years in China.

### 1975

**Malcolm Reeves**, Master of Technology 1975, has worked in Australia, New Zealand and the USA. Malcolm, who was once a lecturer at Massey is well known as a wine maker and researcher, owns his own winery, and lectures at EIT.

### 1976

**Lynne Dovey**, Bachelor of Arts (Hons) 1976, graduated with an MBA from the Massachusetts Institute of Technology in June 2002 after studying as a Sloan Fellow. Back in New Zealand she is with the State Services Commission and seconded to Child, Youth and Family.

### 1977

**John Patrick De Luca**, Bachelor of Horticultural Science 1977, has managed the parks/community facilities at Matamata Piako District Council for the last eight years. Before joining the Council John was a horticultural and landscape consultant in the Waikato Region, first working through an architectural firm and then on his own behalf.

### 1978

**Greg Hughson**, Bachelor of Science 1978, worked at Ruakura for seven years, during which time he graduated with an MSc. He then made a career leap, studying theology and graduating with a Bachelor of Divinity with distinction in 1988. He became a Methodist minister in Feilding and then Gisborne. Since 2000 he has been the Ecumenical Chaplain at Otago University.

**Kathleen Irwin**, Bachelor of Education 1978, graduated with an MEd in 1998, then began work at Victoria University, working to establish Māori Education there. In December 2002 Kathleen graduated with a PhD from Victoria. She is currently National Manager (Research and Development) at the Te Kohanga Reo National Trust and has her own consultancy specialising in Māori development and research.

### 1979

**Robbie Ellison**, Bachelor of Horticultural Science 1979, is married with three sons and living at Mount Maunganui, where he has spent his career in the kiwifruit industry, first in development, and then, for the last 20 years, as a grower. Currently he operates 12 canopy-hectares of kiwis, mostly green kiwis and some gold. He has been a Director of Drypak Postharvest for four-and-a-half years.

**Stuart Middleton**, PG Diploma in Secondary Language Teaching 1979, (who is also a Waikato and London University alumnus), is the executive director of student affairs at the Manukau Institute of Technology. Last year Stuart won the Qantas Media Award for best social issues columnist for his work in New Zealand Education Review.

### 1981

**Sarah Olsen**, née **Rogers**, Bachelor of Arts 1981, headed to the UK in 1982 and didn't return to New Zealand until 1996. In the UK she worked for Arrow Electronics UK, first spending five years in telesales and then three years in the accounts department. Since returning she has worked part time for NRB and NFONZ, market research, as a census supervisor for three months full time, and for the 2002 election. Sarah married in 2001.

### 1982

**Barry Rait**, Bachelor of Education 1982, is a masters athlete and weightlifter and is studying part time towards an MMgmt at Massey and a BSport&Recreation at Southland Institute of Technology. He is looking forward to reaching the age of 70 and the competitive edge he will gain as a youngster in a new masters athletics class.

## 1983

**Morison Tarrant**, Bachelor of Arts 1983, went on to study medicine, spending two years' residency in Auckland and time training in psychiatry in Sydney. He now has his own private general adult psychiatry practice on the lower North Shore, with mood disorders a special interest. Morison is married and a Jaguar enthusiast. His restoration of a 1982 Jaguar X36 is nearly complete.

## 1985

**Bruce Dick**, Master of Science 1985, is living in Tasmania and began working for Selborne Biological Services six months ago. Bruce shifted to Australia in 1987. In 1993 he graduated with a Postgraduate Diploma in Education from Queensland University of Technology and between 1994 and 2002 he taught. Between 1996 and 2001 he lived in and helped develop an eco-village.

## 1987

**Dean Chrystal**, Bachelor of Regional Planning 1987, became a Wellington town planner before shifting to the UK, where he worked as a planner from 1990 to 1993. In 1994 he joined the Christchurch City Council as a senior planner, leaving in 1998 to become the joint partner in a consultancy business, which now employs six staff.

**Craig Curphey**, Bachelor of Business Studies 1988, writes that he is leading an enjoyable life with his wife and daughter in a village near Moscow, where he has established a consulting company, Rekanz Ltd. Craig had been working with multinationals in finance and general management.

## 1988

**Alisi Vudiniabola née Volavola**, Bachelor of Arts 1988, graduated with a Master of Arts in Education from the University of the South Pacific, Suva, Fiji, in 1998.

## 1989

**Craig Astridge**, Bachelor of Business Studies 1989, became the Queensland state manager for Singapore Airlines in 2002. His previous posting had been for two-and-a-quarter years with Singapore Airlines Head Office in Singapore (Craig was the first New Zealander posted there). He has now been with Singapore Airlines for over 10 years.

## 1990

**Nigel Bagnall**, Diploma in Second Language Teaching 1990, spent two- and three-year stints teaching in New Zealand, England, New Zealand (again) and France. He then spent seven years in Melbourne, acquiring a PhD along the way. In 1994 he shifted to Sydney. He has taught at Sydney University ever since.

**Joan King, née Pierce**, Diploma in Health Administration 1990, has gone on to graduate with a Professional - Postgraduate Diploma in Science (Community Nutrition) in 1994 and a Postgraduate Certificate in Diabetes in 2002, both from Otago University.

**Helen Milner**, Bachelor of Veterinary Science 1990, went to the United Kingdom, six months after graduating, to specialise in energy. She spent 10 years there, along the way graduating with a PhD from Cambridge University. Three years ago she returned to New Zealand. She recently shifted to Christchurch to take up a partnership in a veterinary surgical specialty practice.

## 1991

**Brian Harmer**, Master of Business Administration 1991, a lecturer in Information Systems at Victoria University, has just completed a PhD in Communications Studies, a degree he enrolled for after a tongue-in-cheek suggestion from an MBA classmate.

**Sam Johnson**, Diploma in Business Studies 1991, after a short time overseas, worked first for three years with the Rural Bank in Thames, and then as a technical consultant with Farmers Fertilisers, Whangarei. In 1996 he joined the Bank of New Zealand in Whangarei as an agribusiness manager. For the last three years he has been based in Palmerston North as an area manager in the Northern Region.

**Karen O'Connor**, Bachelor of Veterinary Science 1991, first worked in mixed animal practice at Te Puke, then spent a year travelling and locuming overseas. On returning pregnant, she worked share-milking cows with her husband as well as part time in small animal practice. Over the last four years Karen has continued to work part time tutoring veterinary nursing at the BOP Polytechnic and moderating assessments for the NZ Qualifications Authority. She also sits on the ANTECH Board.

**Marty Smillie**, Bachelor of Business Studies 1991, has been married for three years and has "a darling daughter, born April 2003". Marty works for BT IGNITE, where he is responsible for global business development and planning.

**Jan Ellen Walter-Kerr née Walter**, Bachelor of Education 1991, taught in Japan for five years before moving to Thailand to take up another international school position. The experience, she writes, broadened her interest in issues associated with English as a second language as well as her interest in world affairs.

## 1992

**Glenda Catherine Giles**, Bachelor of Arts 1992, teaches English and Science at a remote high school in Sandaun Province of Papua New Guinea near the Papua New Guinea-Indonesian border. The school, which is accessible only by plane or by canoe up the Sepik River, is surrounded by rainforest. The students come from nearby villages or Vanimo town.

**Gwyn Russell Underwood**, Bachelor of Agricultural Science 1992, has had a career in teaching, much of it based in Japan. He was appointed middle/high school principal of Osaka International School in 2002.

## 1993

**Anthony Ford**, Master of Educational Administration 1993, left education in 1996 having been the principal at St John the Evangelist School in Otane 1984-96. After spending three years teaching adult religious education and completing a Master's in Religious Education from the Australian Catholic University through the Catholic Institute of Theology in Auckland, Anthony studied at Holy Cross Seminary and was ordained a priest of the diocese of Palmerston North in November 2001. He is now a priest in the Hastings pastoral area.

**Leo Lerios**, Master of Philosophy 1993, has been involved in the foreign-assisted projects of the Department of Agrarian Reform in the Philippines.

**Karen Ruth Shepherd**, Bachelor of Social Work 1993, has worked in care and protection social work and travelled around Europe. Studying extramurally, she has recently completed the Diploma in Social Service Supervision and she is in private practice one day a week. Karen recently became a home owner in Rongotea, Manawatu.

**Rachel Wastney**, Bachelor of Agricultural Science 1993, worked in a number of primary industries, as variously an apple grader, dairy farm worker and sawmill worker, before retraining to become a secondary school teacher.

## 1994

**Nicola Deal**, Graduate Diploma Media Studies 1994, has worked for South Pacific Pictures (who make Shorthand Street) and for various companies in Britain. She is now in Melbourne working for the ANZ Bank as a project administrator.

**Kevin Taylor**, Master of Business Administration 1994, was the project manager for development of the Centre for Innovation at the University of Otago. He went on to manage leasing and fit-out arrangements for tenants and biotech start-ups and then to developing and promoting technology business incubators. He is now, he writes, "applying project management methods and systems to incubation, technology start-ups, smart growth initiatives and many new 'knowledge' projects."

## 1995

**Frank Boddy**, Master of Education 1995, has been teaching since 1966 in primary, intermediate, secondary, tertiary and adult institutions. He gained his BEd in 1986. While working on his MEd, he spent four years part-time relieving. From early 2001 he has been with Awatapu College.

**Richard Hills**, Bachelor of Resource and Environmental Planning with Honours 1995, first worked in Tauranga, becoming very involved with the drafting of the Tauranga District Plan, "its first such Plan under the Resource Management Act 1991." While there he completed his Masters Degree in Planning, graduating in 1998. In 2000 he returned to Palmerston North, taking a position with the Palmerston North City Council and becoming a member of the New Zealand Planning Institute in 2002. That same year he was appointed Senior Project Officer (Regional Planning) at the Western Sydney Regional Organisation of Councils Ltd. "This organisation is currently taking the lead role in developing a 20-year strategic plan for the Greater Western Sydney Region. It is a region of 6,500 square kilometres and 1.7 million people, and which is expected to reach 2.2 million in 2019. Major issues for the region involve finding land to accommodate an additional 500,000+ people, resolving transport problems (lack of public transport and congestion) and balancing these two main issues against others associated with the protection of the environment (the region also includes the world heritage area of the Blue Mountains for example) and social needs."

**Jonathan Malley**, Bachelor of Business Studies 1995, has enjoyed bouts of travel to Britain, Norway, Bali, the United States, Mexico, Australia and Norfolk Island. He has more planned, he writes, "hopefully with work." Jonathan has been a Traffic Controller for five years now, and is based in Christchurch working with en-route radar. He would "like to work overseas within the next year or so. I hold my private pilot's licence. Massey put me in good stead for my working life."



**Sarah Smith** née **Heveldt**, Bachelor of Technology 1995, is working in Christchurch, doing environmental work for a variety of clients, much of it related to air quality and contaminated sites. Sarah is married to Vin (an Ashburton native and Lincoln graduate), and the couple are “currently in DIY mode with our 1939 bungalow, learning to ride horses and struggling with intermediate level Spanish at night school. Still have great memories of my time at Massey.”

## 1996

**Warren Dalzell**, Postgraduate Diploma in Business Administration 1996, has merged his strategic advisory consultancy into Northington Partners investment bankers and had clients in numerous sectors, including food and beverage, transportation, biotechnology, manufacturing, merchandising, and export services.

**Barbara Valerie Nunn**, née **Brown**, Bachelor of Arts 1996, now has an MA(Hons) in Philosophy from Victoria University, Wellington. She has a PhD in Philosophy in progress with the Australian National University in Canberra.

## 1997

**Margaret Armstrong**, Graduate Diploma in Business Studies 1997, first managed and then, in September 1997, purchased the business now known as Armstrong Alpine Realty Ltd. She has four sales consultants working out of the agency.

**Suzanne Bassett**, Master of Science 1997 moved to Australia in October 2001 where her partner, Dr Grant Blackwell, took up an FRST post-doctorate with Sydney University. Suzanne currently spends time in New South Wales eucalypt forest “chasing bettongs and bandicoots and lots of native rats”. She is also in demand at Rotorua’s Rainbow Springs, where she spends the kiwi breeding season hatching North Island brown kiwi chicks. “Zoology degrees are just great!!!”

**Christine Brannigan**, Master of Business Administration 1997, terms 2002 a busy year. In June Christine gave birth to “bouncing baby twins, Frances and Alexander.” In December she travelled to Scotland to marry and, incidentally, to see her first white Christmas. Christine started back at work part time in February.

**Kate Medicott**, Bachelor of Education 1997, has been teaching for seven years, based in Wanganui, Palmerston North and now Hamilton, where she is a team leader at a growing intermediate school. She is also a curriculum leader in social studies and has been a co-leader of the health and physical education curriculum implementation.

**Richmal Oates-Whitehead**, née **Whitehead**, Postgraduate Diploma in Health Service Management 1997, has a PhD in Molecular Genetics and is a consultant obstetric epidemiologist with the Royal College of Paediatrics.

**Brendan Richard Whyte**, Master of Philosophy 1997, worked as a volunteer in development work in Thailand and Sri Lanka before completing a PhD in geography at the University of Melbourne, where he now manages the Development Studies programme.

## 1998

**Windsor Jones**, Postgraduate Diploma in Museum Studies 1998, was appointed Curator at the NZ Army Museum, a position he held for two years.

**Tony Meachen**, Graduate Diploma in Business Studies 1998, has had sports development company contracts with numerous teams including the IRB 7s Wellington, IRD, NZRFU, WRFU, and Manu Samoa Ltd. Tony has also been the coach for Wellington RFU 7s and the manager for Manu Samoa 7s for the IRB World 7s series 2002/2003.

**Clem Powell**, Bachelor of Science 1998, moved to Canberra to do a PhD in organometallic chemistry, now almost finished.

**Julie Seuseu**, Bachelor of Arts 1998, is studying towards an MSocSci at Waikato.

**Nigel Strang**, Bachelor of Aviation 1998, moved to Wellington after graduating, where he took up a contract position as administrator for the safety investigation and analysis group of the Civil Aviation Authority of New Zealand. In early 2002 he was appointed air safety investigator – data administrator in the safety investigation unit of the CAA. This involves accident and incident safety investigations with aircraft primarily involved in New Zealand’s tourism aviation industry.

**Philip White**, Master of Business Administration 1998, has been promoted to national sales manager for the Orica Woodcare (Cabots) business in Australia.

## 1999

**Michelle Beard** née **Rogers**, Bachelor of Veterinary Science 1999, worked for two years in private practice in Tauranga when she graduated. For the last two-and-a-half years Michelle has called Kaitia, where she has a private practice, home. She has also married. “I love fishing and diving every weekend when not on call,” she writes.

**Martin Paul Cole**, Postgraduate Diploma in Business Administration 1999, writes: “Doing my DipBusAdmin gave me an excellent opportunity to explore all the facets of the company I work with. I came to better understand some of the reasons why it had failed in some areas and succeeded in others. I learned a great deal about how organisations grow and develop as well as the sometimes tenuous links that hold them together. Some of these are formal and others informal. As an engineer I now feel better equipped to make my way through the organisation and hence perform my job that much more effectively.”

**Marion Cowden**, Master of Business Administration 1999, completed a modular MBA while chief financial officer at the Health Funding Authority, then in January 2000 moved to Australia, first temping as finance manager at the Botanic Gardens in Sydney then working in Canberra for the Australian Federal Police as general manager, people and finance management. In June 2003 she moved to London to work for the Commonwealth Secretariat as director of corporate services.

**Ginny Driscoll**, Bachelor of Veterinary Science 1999, has worked in large-animal-related veterinary practices since graduating, including clinical practice in the Manawatu and Taranaki. In Australia she worked for a large pastoral company, “where I pregnancy tested 32,000 cows in six months!” she writes, and in sheep artificial

breeding. She is currently studying for the Australian College of Veterinary Sciences exams in Sheep Medicine.

**Margaret Dynes**, formerly **McEwan, McDonald**, Bachelor of Arts 1999, studied for her BA extramurally while working full time and bringing two children up as a single parent. “After being capped I applied to teach English to students in Japan and spent a year in Japan on leave from my school,” she writes. “Both my children have gained tertiary qualifications from Massey University and now, with my degree, I can travel and work worldwide.”

**Gareth Pearce**, Bachelor of Arts 1999, completed his degree extramurally while living close by Mt Ruapehu, then took up the position of sales and marketing manager at the Grand Chateau. Gareth sits on a number of regional development committees including the Ruapehu Marketing Group, and does international marketing with the Lake Taupo International Marketing Group. Gareth enjoys the challenges of contributing to New Zealand’s fast growing and vibrant tourism industry.

**Angela Taylor**, Diploma in Business Studies 1999, has moved from Auckland to Whangarei, where she owns and operates a 20-bed retirement home.

**Janetta Findlay**, née **Whaley**, Bachelor of Arts 1999, completed an Adult Teaching Certificate at Eastern Institute of Technology in 2001. After being medically retired from 25 years’ social work in March 2002 Janetta underwent professional life coaching and spent seven months living in England. She is now developing her own private practice in professional life coaching, specialising in blood type, diet and life-style strategies.

**Maree Stocks**, Bachelor of Arts 1999, is working as a lecturer in office systems and administration at Christchurch College of Education and as a computing tutor. Maree has a Master’s underway, but has taken a year off to “do some personal catchup and learn the piano”. At writing, Maree was waiting to find out if her first journal article had been accepted.

**Debbie Summers**, née **O’Toole**, Bachelor of Business Studies 1999, worked for a telecommunications firm in Lower Hutt managing marketing and communications, a job that included some overseas travel managing trade exhibitions. She then shifted to Auckland, working first in corporate communications at Carter Holt Harvey and then as national marketing manager for BDO Spicers, Chartered Accountants and Advisers. Debbie is now back in Wellington.

## 2000

**Barry Allan**, Bachelor of Arts 2000, who had taught Business Law for the School of Accountancy at Massey for the last eight years, writes that in March 2003 he achieved “a kind of sideways promotion... Although I am still at lecturer level, I now teach law in the law faculty at Otago University, which is where I obtained my first degrees.”

**Claire Anderson**, Bachelor of Business Studies 2000, travelled and worked abroad for two-and-a-half years, before recently returning and taking a job with Tasman Insulation, the manufacturers of Pink Batts, as their marketing assistant.





**Wendy Gooch**, Bachelor of Social Work 2000, has “a beautiful daughter, Mahina and I’m working at the new Auckland City Mental Health Unit - Te Wheta Tawera, ex Conolly Unit. I am enjoying my job working in the acute inpatient unit. There’s never a dull moment. I love the work and the people I work for – consumers.”

**Ted Fox**, recommended for the degree of Master of Business Administration, 2000, writes: “While the MBA Alumni was still extant I was editor for Paragon. I have kept an electronic version (MaMBA) simmering away on the ‘back burner’ and am now reactivating it. The theme is slightly different, following that of my MBS research paper and my new business – e-commerce and the Web. MBAs can get the newsletter by emailing MaMBA\_Alumni\_Cyberline-subscribe@yahoogroups.com.”

**Jill Harrison**, Bachelor of Technology 2000, was appointed the project manager for the multi-million-dollar golf course development on Cape Kidnappers, Hawke’s Bay in July 2002. The job has mostly involved the engineering infrastructure development (roading, water supply, power supply, Telecom service) for an eight-kilometre access road. Jill is also heavily involved with the project’s iwi consultation.

**Charlotte Chan Mow**, Bachelor of Business Studies 2000, was first employed at the Treasury Department in Samoa as a cashflow officer for two years, then was appointed the company accountant for Telecom Cellular, a subsidiary of Telecom NZ. She has also become a Certified Public Accountant.

**David Pacheco-Rios**, Doctor of Philosophy 2000, worked as post-doctoral Research Associate with AgResearch developing decision-support programs for nutritional management. He then went to Canada to do post-doctoral work, modelling amino acid metabolism in the gut with Agriculture and Agri-Food Canada in Lennoxville (Quebec). In July 2003 he returned to Palmerston North, where he now works for AgResearch as a research scientist in nutrition and metabolism.

**Chris Raine**, Graduate Diploma in Emergency Services Management 2000, returned to Massey in 2003 to begin an MPhil in Emergency Services Management. In the intervening period he developed emergency planning groups and consulted with rural communities in Southland to develop Community First Response groups in partnership with Emergency Services.

**Anshuman Singh**, Bachelor of Information Sciences 2000, writes: “I started out working for Intel as a software engineer, developing computer telephony solutions for their customers in USA and Europe. After only eight months, I got a job offer from Ernst & Young, which then became Cap Gemini Ernst & Young. I joined as a consultant and after less than a year got promoted to a senior consultant. I also received an Excellence Award for a project in which I was the technical lead. I led small teams that implemented software solutions for businesses in New Zealand, Australia and Asia. After two years I decided to move to Australia, where I am now working for a company called Avanade. This is a joint venture between Accenture and Microsoft. Now I am planning to do an MBA and am researching universities in Australia and USA. I intend making a decision in the next few months, and then the gruelling process of writing applications will start.”

## 2001

**Sharon Belsham**, Master of Education 2001, has moved from a large urban school in North Auckland to a small country school in the Waikato where “I live on a 10-acre block with my new partner and

our two families have blended to become the Brady Bunch! I am still debating whether to pursue a doctorate or just keep on teaching.”

**Anne Benjamin**, Diploma in Veterinary Nursing 2001, first worked in America for two-and-a-half years in one of the largest equine hospitals in the world specialising in the care of equine neonates. She then spent a season in NSW Australia in an equine hospital. In July 2001 she returned to New Zealand and set up an equine intensive care unit

**Colette Blockley**, Master of Nursing 2001, works as a nursing lecturer but is, she writes, committed to ongoing education. Currently she is a PhD candidate at Victoria University looking at how people newly diagnosed with cancer make decisions.

**Kirstine Collins**, Bachelor of Business Studies 2001, was posted in January 2003 to Burnham as executive officer, placing her second in command of 3 Supply Company, which provides supply and catering support to Burnham Military Camp.

**Gary Hartley**, Postgraduate Diploma in Business Administration 2001, notes that Massey trains its competitors. “And why not!” he writes. Gary is the Marketing Manager of WELTEC (the Wellington Institute of Technology).

**Nikki Hill**, née **Butler**, Bachelor of Social Work 2001, is on maternity leave from a social work position at the Bethany Centre where she is involved in a parenting programme for pregnant teens and young mothers. She is also completing an MPhil: The impact of pregnancy and child rearing on young mothers’ educational attitudes, experiences and aspirations.

**Gillian Mangin**, Postgraduate Diploma in Business Administration 2001, rejoined MAF in October 2002 after 10 years in local government management in Masterton. She now works in the sector performance team in Wellington as the dairy industry analyst.

**Alicia McDiarmid**, Bachelor of Technology 2001, writes: “I have since talked at University to tell of my career enjoyment to motivate students. I am now an auditor/lecturer in the food safety industry. I also participate in biosecurity services. Both jobs include field and programme development work. Before this I was a micro-biologist in agriquality laboratories. A great career and tonnes of different experiences each day.”

**Philippa Mello**, Bachelor of Science 2001, has returned to Bermuda, where she has been appointed the chief SPCA inspector. “I am utilising all my knowledge and contacts gained during my time at Massey. Though missing my friends, I have launched myself into an interesting and meaningful career.” Philippa had lived in New Zealand for the last 14 years, and in Palmerston North for the last five.

**Marilyn Power**, née **Dally**, Bachelor of Arts 2001, has a 22-hour-a-week position at the City Library working in advisory services as well as a casual position at the Fonterra Research Centre. Marilyn has joined the Palmerston North Choral Society.

**Prasong Siri Wongwilaichat**, Doctor of Philosophy 2001, is a lecturer and head of the Department of Food Technology at Silpakorn University in Thailand.

**Frances Stevens**, née **McKenzie**, Master of Arts 2001, writes that she and her husband were expecting their first baby at the end of April 2003.

**Griffin Yu**, Postgraduate Diploma in Business Administration 2001 has been promoted to website manager with the company he has

been with for the past eight years. Griffin and his wife plan to head to Canada to travel extensively. They have no immediate plans to return.

## 2002

**Lou Bird**, Master of Philosophy 2002, became the executive secretary for the Plants Market Access Council (PMAC), a new horticulture body, in March 2003. The appointment took her from Palmerston North, where she had been national horticulture advisor to the Department of Corrections, to Wellington. She loves living in Wellington.

**Brendan Bourke**, Bachelor of Business Studies 2002, first headed to Melbourne for some work and sport. Then, he writes, a “job came up in Palmerston North, so I applied and was lucky enough to get it. It’s a great job and I am currently helping out with Varsity A rugby side. Working on the 75th Jubilee of the rugby club as well, which is to be held Queen’s Birthday 2004.”

**Pepe Choong**, Bachelor of Arts 2002, has completed her MA thesis at the school of Asian studies, Auckland University. Her thesis, *New Zealand Chinese Women: A Hyphenated Identity of East and West*, addresses issues such as personal identity, the construction of national identity and multiculturalism. She is currently the community education co-ordinator at Long Bay College.

**Angie Cooper**, Bachelor of Science 2002, is teaching, a profession she finds “very challenging but very enjoyable. Every day is different and busy.”

**Shelley Eccles**, Bachelor of Applied Science 2002, is living in Kerikeri working in an occupation that, she writes – a little mysteriously – she enjoys and is related to her studies.

**Miles Lacey**, Bachelor of Arts 2002, spent 15 months job hunting before returning to tertiary education. He is in the midst of a final draft of his first novel, he writes, “which I hope to be able to publish by the end of the year.”

**Pataka Moore**, Bachelor of Arts 2002, returned from overseas at the end of 2001, since when he has been employed as an environmental researcher for Te Wānanga-o-Raukawa in Otaki. “I have been looking at re-introducing freshwater Māori indicators to access water quality. I have also been looking at and trying to address a number of resource management and environmental issues concerning New Zealand, especially Māori, including tuna (eel) enhancement programmes. I have begun a Postgraduate Diploma in Māori Resource Development under Nick Roskrige at Massey, Palmerston North.”

**Linda O’Reilly**, née **Kelly**, Master of Business Administration 2002, is now practising public law, mainly to do with the environment and local government.

**Eustina Oh**, Bachelor of Technology (Hons) 2002, came to New Zealand from Korea in 1996. In December 2001 she joined



Fonterra as a graduate trainee on the Master of Dairy Science and Technology programme. Since January 2003 she has been a supply chain co-ordinator in Fonterra at Te Rapa.

**Avril Ralston**, Certificate for Teacher Aides 2001, has been a teacher aide at a local school and in 2002 worked as a support teacher with a friend who has five children and is home schooling. Avril is now studying towards a National Certificate in Early Childhood Education at Dunedin College of Education.

**Karl Signal**, Postgraduate Diploma in Arts 2002, completed a Diploma in Teaching at the Christchurch College of Education in 1993. For the last six years he has taught at Tauranga Boys' College, where he has been acting head of the English department for the latter half of 2003.

## 2003

**Ruth Armishaw**, Bachelor of Music 2003, is the representative for 'Oceania/Pacific Regions' in a newly established singing group called SOUL (Singers of United Lands). The other four in the group hail from Venezuela, Serbia, South Africa and the Philippines. SOUL is to travel to Michigan, USA, to tour 35 schools, spending a week at each. "We will teach the students some of the music, do performances with them, and also teach them about a variety of aspects of their respective cultures and countries. I see being part of the first ever SOUL ensemble as an important part of my development as a musician and it is also a great honour, not just for me, but for our country."

**Sujatha Attanayake**, née **Senanayake**, Bachelor of Science 2003, is planning an MSc in Nutritional Science at Albany. Before coming to New Zealand, Sujatha was a teacher in Sri Lanka.

**Rumesha Cyril**, Bachelor of Technology 2003, started work in February 2003 at Freeze Dried Foods NZ Ltd as a development technologist. Before coming to NZ in 1995, Rumesha had lived in Zambia and Sri Lanka, where he was born.

**Antje Duda**, Postgraduate Certificate in Education 2003, is heading home to Germany with her family to look for a new job. There she intends to continue extramural study. "Hopefully, after some years of getting more work experience in Germany we will come back to NZ. My plans are either doing an EdD or working in education administration or teaching."

**Andy Frizzell**, Master of Philosophy 2003, completed his degree in 2001, but spent 2002 seconded to the UNDPs mine clearance programme in Mozambique as the Chief Technical from the NZ Army. "The development papers I completed as a part of my degree were most useful in working with the UNDP Country Office and demining in general, which has an increasingly developmental focus," he writes. Now back in New Zealand, Andy is working in Defence headquarters looking at corporate performance appraisal.

**Joyce Gibson**, née **Billington**, Graduate Diploma in Technology Education 2003, has switched jobs. Formerly she was a head of department for home economics and taught tourism, hospitality, materials technology and home economics at NCEA Level I as well as national certificates in tourism and hospitality. She is now the assessment and moderation facilitator in the Tertiary Assessment and Moderation Unit of the New Zealand Qualifications Authority.

**Mike Gray**, Bachelor of Business Studies 2003 worked with the Accounting firm of Bennett & Currie in Palmerston North while doing his degree, taking papers in both internal and extramural modes. "This made it a four year degree for me and I am now undertaking

the postgraduate study towards the professional accountants' diploma," he writes.

**Meredith Hullis**, Bachelor of Science 2003, was promptly employed by Pacificwide NZ Ltd when she graduated. "I perform all the research and development as well as laboratory and technical support for a group of companies that export growing media made from bark, sphagnum and coco peat to Japan," Meredith writes.

**Kate Maguire**, Postgraduate Certificate in Tertiary Teaching 2003, worked for five years at Massey University as researcher and lecturer. Two of those years were spent seconded to ENZ conducting research on the storage potential of apples. From September 2003 Kate will be on a two-year Zespri post-doctoral scholarship to study kiwifruit in Belgium.

**Sonya Matthews**, Bachelor of Arts 2003 has returned to New Zealand after an absence of six years and has been studying towards an honours degree in Criminology at Victoria. "I am hoping to gain a 1st Class Honours so I can fast track myself on to a PhD programme - time will tell!"

**Janice McDonald**, Bachelor of Education (Teaching) - Primary 2003, is currently enrolled in a Master of Education.

**Janice Menzies**, Postgraduate Diploma in Business Administration 2003, has moved Auckland, where she held a managerial position at the Auckland College of Education, and to Jakarta, where she is the principal of an international school. Janice originally trained to be a teacher.

**Philippa Morton**, Bachelor of Education 2003, has her first job as a teacher in a two-teacher school at Ballance School, Pahiatua, which has, she writes, "many rewards, responsibilities and challenges. As well as that I have performed as Beth in Popular Girl and acted on The Strip as an extra during the summer."

**Sanjeshwar Narayan**, Bachelor of Business Studies 2003 has enrolled in a Postgraduate Diploma in Management and Public Administration through the University of the South Pacific.

**Michele Stainburn**, Master of Management 2003, has enjoyed a special year for her family. "Both myself and my eldest daughter will be graduating - my daughter with her Bachelor of Nursing degree and me with a Master's degree in management."

**Hui Yan (Judy) Tsui**, Bachelor of Business Studies 2003, writes: "I'd like to thank you for your help, particularly in my studies. I now work in a leading HK trading company as a marketing executive. I love what I am doing and I'll continue my master's degree next year."

**Matt Wade**, Bachelor of Applied Science 2003, started with Dexcel in January as a consulting officer and is now responsible for managing extension activities for 500 dairy farmers in the lower Northland region.

**David Neumann**, Diploma in Agriculture 2003, began work as a herd manager of pedigree Belgian Blues. He is the farm manager while Lockwood Smith is at Parliament.

**Gavin Neumann**, Bachelor of Applied Science 2003, has trained as a sales representative for Ballance Fertiliser.

## Issue 14 Errata

Apologies to **David Steemson** of Radio New Zealand, whose name we mistakenly gave as David Stevenson.

**Kerry Singleton**, is doing his Master's through Strathclyde University, Glasgow, and not, as reported, Strathmore.

**Liam Sheridan**, BSc, BBS, ACA, has written a kind note putting MASSEY right about the duration of time he spent working at Lion Nathan: one-and-a-half years, not months. He continues "When I got my Massey degree I was working at Middlemore Hospital as Group Management Accountant. I then worked at Lion Nathan for 18 months doing pricing analysis and am now back in public health care at Auckland District Health Board. I am continuing to study through Massey, I am part way through a Graduate Diploma in Economics. The magazine is great, keep it up!"

Current information can be found on the alumni web site:  
<http://alumni.massey.ac.nz>





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**'Reaching Out'**

**by Massey student Nadine Jaggi of Upper Hutt**

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