

IN PASTURES GREEN

The future of farming

TANGO TIME

Visiting South America

Massey

defining *nz*

News from Massey University | Issue 18 | July 2011

BREWMEISTERS

Reinventing home brewing



Sir Richard Taylor receives Doctorate in Fine Arts



MASSEY UNIVERSITY
TE KUNENGA KI PŪREHURŌA

CONTENTS

COVER STORY

18

IN PASTURES GREEN

Landcorp Chief Executive Chris Kelly talks about the future shape of New Zealand farming.

FEATURES

14

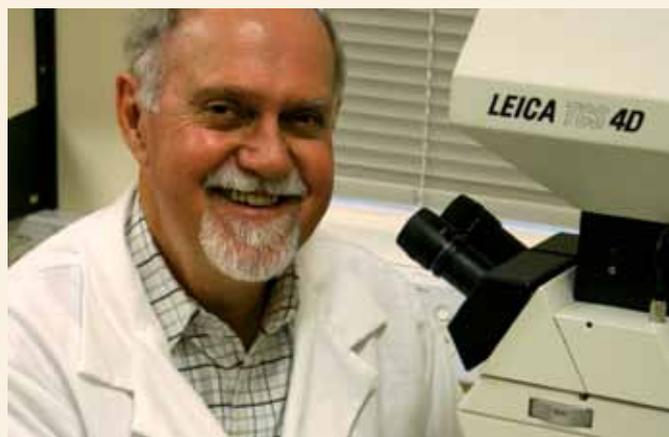
BREWMEISTERS

Ian Williams and Anders Warn are bringing joy to the hearts and palates of well heeled homebrewers.

22

TANGO TIME

An MBA study tour's experience of Argentina and Chile.



Dr Al Rowland was made an Officer of the New Zealand Order of Merit (ONZM) in the Queen's Birthday honours for services to genetic research. Dr Rowland (pictured) retired two years ago from the Institute of Molecular Biosciences, where he received international acclaim for his chromosome research on former military personnel exposed to nuclear testing. Also made an Officer was Professor Martin Devlin, a former Director of Massey's MBA programme. Others of Massey's alumni to be recognised in the honours were Dr John Hellstrom of Picton (Bachelor of Veterinary Science, PhD Veterinary Science), ONZM for services to biosecurity; Therese Angelo of Lyttelton (Postgraduate Diploma in Museum Studies), Member of the New Zealand Order of Merit for services to museums; Dr Paul Livingstone of Wellington (Bachelor of Agricultural Science, Bachelor of Veterinary Science), Queen's Service Order (QSO) for services to veterinary science; Carol Moffatt of Kaiapoi (Bachelor of Arts, Master of Education Administration), QSO for services to education; and Christopher Parsons of Wellington (Postgraduate Diploma in Arts) Distinguished Service Decoration for service with the Defence Force's Special Air Service.

VIEWPOINT

12

THE PRICE OF FISH...

Professor Jacqueline Rowarth on the affordability of food and the future of New Zealand Food Inc.

DEPARTMENTS

2

Campus wide: A round-up of news from Massey's three campuses.

10

On the horizon: Lectures, performances and exhibitions.

16

Tools of trade: The charms of the College of Creative Arts' Type Workshop.

24

Defining people: Chris Chitty, innovator extraordinaire.

25

Mixed media: Medieval Bruges, the future of Māori development, the history of the horse in New Zealand, the extramural library service

26

End notes: Introducing the multidisciplinary BAGHum.



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FROM THE VICE-CHANCELLOR



Sibling rivalry is a terrible thing, and New Zealand has a bad case of it. Whenever we want to beat ourselves up, we gaze across the Tasman to the land of drought, flooding rains and golden good fortune. The comparison is galling. Australia, a country that back in the 1960s had a lower per capita GDP than our own, now has one that is 35 percent higher.

But let me put Australia's GDP into perspective. I have before me a report on the entrepreneurial impact of a single top-tier United States university, the Massachusetts Institute of Technology, better known as MIT.

According to the report's authors, the annual world revenues produced by currently active companies founded by MIT graduates are in excess of US\$2 trillion, NZ\$2.4t.

If MIT were a country, it would have the equivalent of the world's 11th largest economy. Australia, with a GDP coming in at around US\$1.22 t, is the 13th.

And while MIT is admittedly an exceptional university, it is not *that* exceptional.

California's Silicon Valley can trace much of its prosperity to its array of colleges and universities, of which the best known is Stanford. In Britain, Cambridge University lies alongside a development known locally as Silicon Fen.

Here in New Zealand, you will find exactly the same thing: within a radius of each of our universities lies a zone of enterprise populated by entrepreneurial alumni and their businesses.

Not far away from my office on the Manawatu campus are the premises of – an off-the-cuff list – Pixelthis (apps for phones and tablets), Cross Slot No Tillage (sustainable agriculture), wheresmycows (farm mapping and precision irrigation), PolyBatics (nanotechnology), OBO (hockey protection equipment) and Anzode (zinc electrode battery technology). The Wellington and Albany campuses? The same rule applies, just as it does elsewhere. Wherever they may be situated, universities seed, breed and foster innovation and enterprise.

This will hardly be news to New Zealander of the Year Professor Sir Paul Callaghan, who in recent

times has taken to the road with a presentation he calls 'New Zealand: the place where talent wants to live'. Between 1974 and 2001, Sir Paul, now with Victoria University, worked at Massey, rising through the ranks of academia. It was while at Massey that he conducted much of the research that would lead him to cofound the firm Magritek in 2004. Magritek is in the beautifully arcane business of applying nuclear magnetic resonance to such things as analysing rock cores.

Magritek is prospering – as are other New Zealand high-tech niche players, such as Fisher & Paykel Healthcare (respiratory devices), Gallagher (electric fences and weighing systems) and Tait Electronics (advanced radio networks).

New Zealand's top 10 technology companies earn around NZ\$3.9 billion a year. It's a start. Callaghan lays down the challenge for us to up the number of such companies by a factor of 10. Then Australians might look to us occasionally as an example of what might be rather than the other way around.

It won't be easy, for New Zealand faces tough times. As Sir Paul points out, factored by our population base, the ongoing economic impacts of the Canterbury earthquakes on the New Zealand economy are proportionately far greater than that of Hurricane Katrina on the US or the Sendai earthquake and tsunami on Japan. Nonetheless, like any prudent business, New Zealand Inc needs to continue to invest.

Currently New Zealand's Government- and industry-funded expenditure on research and development is less than 1 percent of GDP, significantly lower than that of Australia, Britain, the US or, for that matter, the Organisation for Economic Cooperation and Development average. This has to change.

When were the foundations of the golden age of post-war US economic prosperity laid? A book by the economics historian Alexander Field puts a case for the commitment made in research, development and equipment during the hard years of the 1930s. Indeed, he calls it "the most technologically progressive decade of the century". We cannot defer investing in research and development until the good times return. What sort of New Zealand do we want for our children and mokopuna? Our actions today will decide our country's future.

The good news is that if we invest wisely in research and education, the returns may come more quickly than we suppose. At MIT each graduating class produces more entrepreneurs than the one before it, and the entrepreneurs launch their companies earlier and at ever younger ages.

Steve Maharey
Vice-Chancellor

If MIT were a country, it would have the equivalent of the world's 11th largest economy. Australia, with a GDP coming in at around US\$1.22 trillion, is the 13th.

Hear Professor Paul Callaghan speak at <http://tinyurl.com/3j9hybz>. *Entrepreneurial Impact: The Role of MIT* by Edward Roberts and Charles Eesley in pdf format can be downloaded from <http://entrepreneurship.mit.edu/article/entrepreneurial-impact-role-mit>.



Creativity and the new economy

Sir Richard Taylor, winner of multiple Oscars, Knights Companion of the NZ Order of Merit, now holds an honorary Doctorate of Fine Arts from Massey.

Four years ago Sir Richard was inducted into Massey's College of Creative Arts Hall of Fame, an honour presented in recognition of his stellar career in special effects and animation. Sir Richard studied at Wellington Polytechnic School of Design, a predecessor of Massey's College of Creative Arts, before going on to co-found the film and animation special effects empire Weta Workshop, of which he is a director.

Weta's working pedigree includes the blockbuster movies *King Kong*, *Avatar*, the *Lord of the Rings* film trilogy (work is underway on the prequel, *The Hobbit*) and the children's

programmes *Jane and the Dragon* and *The WotWots!*.

Accepting the doctorate before an audience including many new College of Creative Arts graduates, Sir Richard talked about the importance of being able to draw on an educated pool of talent. "We're thought of as a film effects company. We're not – we're a creative facility servicing the world's creative industry, and we're only as good as the people who gather around us. We have to find passionate, innovative and creative Kiwis to help fuel the work we do, to help keep our clients inspired and coming back – and the most obvious places to turn to are Massey and Vic, the two universities within our own city. They give us an amazing choice of creative talent."

He was proud of the way in which Weta's success had redefined people's aspirations. "New Zealand offers creative opportunities of the wildest and most exuberant kind. You don't have to settle for the simple path. I think possibly that is the most important thing [about our success]. It's told people – people like I was when I was younger – that you can have a future in the arts, that there is a career out there for you, whether it be in film, theatre or some other creative field. It's out there. It's waiting for you – and you can do it in New Zealand."

Pictured: Tania Rodger, Amelia Taylor, Sir Richard Taylor, Samuel Taylor and Norman Taylor.

For more from Sir Richard, go to <http://youtu.be/kxUas4ki-BU>.



That winning combination

At the 2010 Commonwealth Games, 41 members of the New Zealand team were enrolled with Massey, of whom 31 won one or more medals. Eight of the 10 medallists at the 2010 World Rowing Championships were Massey students. Why the association with sporting success?

The strongest reason may be the university's pre-eminence as a distance learning provider, letting athletes study wherever their sporting careers may take them. But it isn't the sole reason. The university also boasts an Academy of Sport; a high performance co-ordinator, who supports student-athletes in both the academic and sporting domains; expertise in sport science, sport management and nutrition; and some enviable sports facilities.

It is fitting then that Massey has been the first New Zealand university to sign up to the 'Athlete Friendly Tertiary Network' set up by the New Zealand Academy of Sport. The network will be made up of tertiary institutions that agree to adopt a set of guiding principles in support of helping New Zealand's high-performance athletes to achieve their sporting and academic aspirations.

Victoria University, AUT University and the University of Waikato have since joined the network.

Rower Storm Uru, pictured, is working towards a Master of Management in international law.



Textile design graduate Kelly Olatunji has won the supreme Zonta Design Award. Jointly organised by international women's organisation Zonta, and Massey University's College of Creative Arts, the Zonta Awards raise the profile of women working in design and are supported by sponsors in the creative industries. Pictured are the award finalists. From left: Katinka Muijliwijk, Anna Hill, Kelly Olatunji, Charlotte Corrigan, Kate Cameron-Donald and Kate Adolph.



Indisputably good

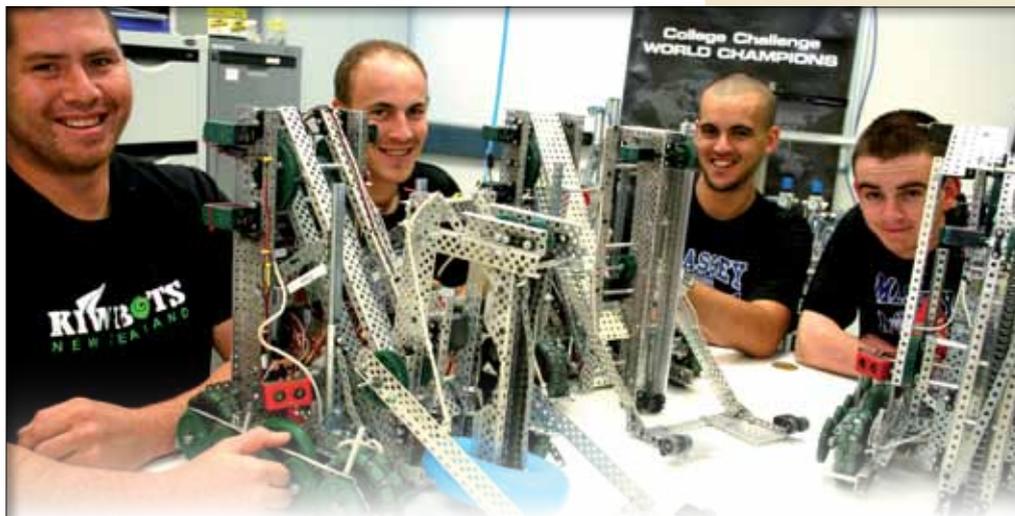
Captain Andrew Taylor graduated this May with a Graduate Diploma in Business Studies majoring in dispute resolution.

A 27-year-old Army lawyer, Taylor has been completing papers at the rate of two per semester via distance learning, a mode that fits his highly mobile life. Nominally based at Burnham, Taylor has had operational placements in East Timor, Singapore and the UK, sitting and completing assignments while in each. His next assignment will take him to Afghanistan.

In places like East Timor and Afghanistan, says Taylor, everyday life is a matter of constant negotiation. "Everything you do – from securing supplies, food and accommodation through to building construction and dealing with contractors – involves negotiation."

Taylor was awarded the Thomson Reuters Prize in Arbitration for the best student (seen here being presented by Professor Claire Massey) and the Arbitrators' and Mediators' Institute of New Zealand prize for the top student in the Graduate Diploma in Business Studies endorsed in dispute resolution.

His wife, Casey Taylor, graduated from Massey last year with a Postgraduate Diploma in Business Administration and has just commenced a Master of Management.



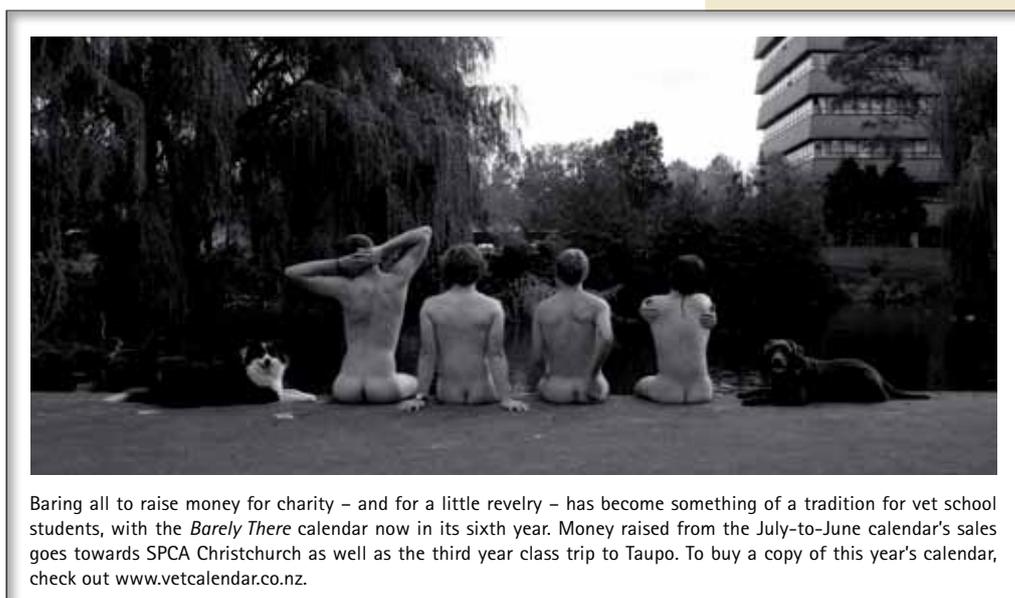
Massey robots achieve world domination

The Massey team – MESS (Massey Engineering Students' Society) – has won the university section of the Vex Robotics World Championships in Orlando, Florida. Unbeaten throughout the competition, the team also picked up the supreme award of excellence, given to the team with the most well rounded robotics programme.

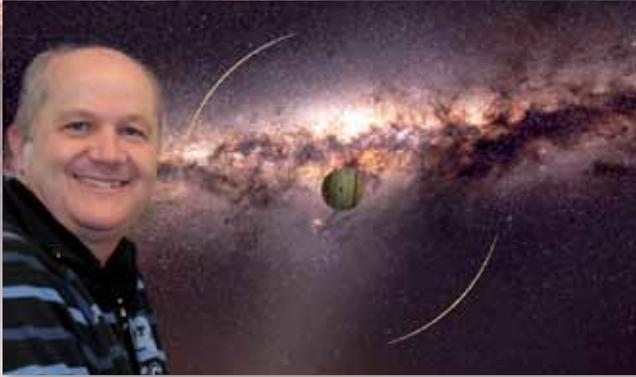
In the Vex Robotics championship, teams design, build and maintain robots using a standardised set of parts to compete in an agreed-upon game. In 2010 the game was 'Round Up', in which the robots picked up doughnut-sized rings and stacked them on goalposts. Points were awarded for 'owning' a goal, with bonus points if a robot could hang off a central ladder. The 2010 World Championships drew more than 10,000 intermediate school, high school and university participants representing 16 countries.

Team captain Maurice Tipene described the team as exhausted but happy. "We were pretty comfortable this time. Last year we were pretty stressed out and our robots weren't quite working right," he says. "This year, we didn't have to do anything to the robots and we did good."

Next year the game will be Gateway. There will be coloured balls, barrels and circular goalposts of varying heights. The Massey team will be there, eager to defend their title.



Baring all to raise money for charity – and for a little revelry – has become something of a tradition for vet school students, with the *Barely There* calendar now in its sixth year. Money raised from the July-to-June calendar's sales goes towards SPCA Christchurch as well as the third year class trip to Taupo. To buy a copy of this year's calendar, check out www.vetcalendar.co.nz.



Lonely planets

The effect was first predicted by Albert Einstein: when a massive foreground object passes in front of a star, the light coming from the star will be curved by the object's gravitational field, causing the star to appear to brighten. The effect is called gravitational lensing, and it can be used to detect objects too dim and distant to be found by other means.

"The microlensing effect is very recognisable," says Dr Ian Bond, of the Institute of Information and Mathematical Sciences in Albany. "The time scale of a lensing effect depends on the mass of the lens [planetary body]. If the 'lens' is a star, it takes 10 to 20 days to pass in front of the star, and if it's a planet, it's a much shorter time."

Over several years, the 1.8-metre telescope at Mount John University Observatory at Lake Tekapo has captured variations in the brightness of some 50 million stars in the Milky Way galaxy, collecting around 50 gigabytes of images per night, which have been analysed using software developed by Bond.

Buried in this vast trove of data, he and his team have found 474 microlensing events, with 10 having durations of less than two days, consistent with Jupiter-sized gas giant planets. These are free-floating planets – also known as 'orphan' or 'rogue' – that are not believed to be orbiting stars.

How did they come to be? One scenario is that these drifting, stray planets have been ejected from solar systems after close gravitational encounters with other planets or stars. Another is that they are 'sub-brown dwarfs' – they form like brown dwarf stars, which are thought to grow from collapsing balls of gas and dust, but lack the mass to ignite their nuclear fuel.

The discovery has led to speculation that smaller, Earth-sized free-floating planets – a phenomenon yet to be detected – may be more common than stars, and that Earth may have a long-lost 'sibling', which was once part of our solar system.

Bond is the principal investigator for the study, which was initiated by University of Auckland physicist Associate Professor Philip Yock. Fellow collaborators are University of Canterbury Professor of Astronomy John Hearnshaw and Victoria University Professor of Physics Denis Sullivan.

MOA (Microlensing Observations in Astrophysics) involves researchers from Massey, Auckland, Canterbury and Victoria Universities, as well as from Japan and the US. A report on the discovery, *Unbound or Distant Planetary Mass Population Detected by Gravitational Microlensing*, has appeared in the *Nature* online science journal.

The MOA project now hopes to find smaller, more Earth-sized orphan planets.

Sweet as honey

Honey has long been known to have medicinal properties, but some manuka honeys are something special. In addition to having the normal antibacterial qualities of honey, they are rich in a powerful and stable antibacterial property the industry has trademarked as Unique Manuka Factor®. Hence these honeys are a sought-after commodity and command good prices.

The New Zealand manuka honey industry is currently worth an estimated \$75 million, but it could be worth much more. Plans are afoot to scale up the industry 16-fold in the next seven years to a worth of nearer \$1 billion.

Massey's part will be developing manuka plantation husbandry techniques. Institute of Food, Nutrition and Human Health head, Professor Richard Archer explains: "Our staff will match new cultivars to the growing environments best suited to honey yield and quality. This will include considering the effects of soil biota, companion plants and insects. The work will be achieved in glasshouses, in controlled environments and in the field."



Institute of Food, Nutrition and Human Health head Professor Richard Archer, Manuka Research Partnership chairman Neil Walker, Taihape beekeeper Don Tweedale, Dan Riddiford of Te Awaiti Station and Massey's Professor Michael McManus.

Massey's work will be funded by a Primary Growth Partnership entered into between the Ministry of Agriculture and Forestry, Manuka Research Partnership (NZ) Ltd and Comvita. The partnership will invest more than \$1.7 million in research to cultivate high active manuka plantations on back-country land, much of it marginal.

Comvita Chief Supply Chain Officer Nevin Amos looks forward to better yields per hive, more hives per hectare and more land given over to manuka plantings. "We believe we can double each of these factors to grow production and meet demands." He believes fewer than 50,000 of the one million hectares of marginal land available need to be planted in manuka for the industry to approach its \$1 billion goal.



Photo by 'Avenue', commons.wikipedia.org.

Singing different songs

Just as an Australian may struggle to understand a Glaswegian accent, or a New Yorker is flummoxed by Cockney slang in the English-speaking world, similarly bemused responses are expected when North Island saddlebacks from three Hauraki Gulf islands meet on the mainland later this year.

That's because birds from different islands have developed new and exclusive dialects – to the point that they appear to have trouble deciphering each other's wooing songs and war cries.

Studying the impacts of translocation on saddlebacks, or tieke, led conservation biologist Dr Kevin Parker to find some intriguing parallels between the way avian and human language changes through migration. In the same way the English spoken by Scots and Irish settlers in New Zealand transformed into Kiwi-ese after several generations, so too have saddlebacks evolved their own localised jargons, albeit in a relatively short time span and across a small geographical area.

For his ecology doctoral thesis Parker made 2700 recordings of male saddlebacks' rhythmical song on 13 islands off the coast of the North Island, where the bird – once prolific in North and South Island forests – is now found. When he compared them, he found that only 30 percent of the 202 different songs are shared between islands, with 70 percent exclusive to a single island.

Then, in a series of experiments to test whether the birds could recognise utterances of counterparts from different islands, he played back recordings of familiar and unfamiliar saddleback songs to 10 pairs of Motuihe Island saddlebacks and observed their reactions. Where the mating or territorial song was more 'foreign', the birds either ignored the calls or left the area.

"In humans, love overcomes language barriers, but in many bird species if you sing the wrong song, you are out on your own," says Parker, based at the Institute of Natural Sciences at Albany.

Defining the song diversity a 'micro-evolutionary' event, he says it is likely that saddlebacks have been changing their tune through loss of songs after translocations and subsequent errors in learning or imitating songs within new populations.

He describes the phenomenon as an unexpected 'side effect' of the translocation process, which is undertaken to ensure the survival of the saddleback. Belonging to New Zealand's unique wattlebird family (callaeidae), an ancient group that includes kokako and the extinct huia, saddlebacks have been moved from the original population on Hen Island to protected, pest-free islands, first by the New Zealand Wildlife Service in the 1960s and more recently by the Department of Conservation and community conservation groups.

In that time, groups of between 20 and 50 birds have been captured and transported to little-known Whatupuke, Lady Alice, Coppermine, Red Mercury, Cuvier, Stanley, Mokoia and Moutuhora Islands, as well as the better-known Tiritiri Matangi, Little Barrier and Motuihe Islands in the Hauraki Gulf, to Kapiti Island off the coast of Wellington, and to mainland sites of Karori near Wellington and Bushy Park near Whanganui.

In a novel translocation he is managing later this year, Parker is keen to see how the conversation develops when saddlebacks from three islands come together on the mainland at Tawharanui Regional Park, north of Auckland.

He anticipates the distinct dialects will be a conversation stopper, preventing birds from different islands mingling and mating at first. But subsequent generations will soon learn each other's songs and even make up new ones, enabling them to swap sweet nothings and neighbourhoods.

"It's a bit like the development of Polynesian languages in the Pacific or the Romantic languages in Europe," Parker says. "It's a reflection of patterns of human colonisation."

 "In humans,
 love overcomes
 language
 barriers, but
 in many bird
 species if you
 sing the wrong
 song, you are
 out on your
 own."



North Island saddleback
 (courtesy of Martin Sanders).



NZFOODAWARDS

IN ASSOCIATION WITH MASSEY UNIVERSITY

Entries invited for 2011 NZ Food Awards

Entries have opened for the now-annual NZ Food Awards. This year the awards will be part of the Rugby World Cup Expo at the Viaduct Harbour, overlooking Auckland's beautiful Waitemata Harbour. New Zealand food writer and experienced judge Ray McVinnie will lead the judging panel.

Key dates

- 29 July: Entries close
- 5 August: Products received for judging at Massey University's Albany campus
- 12 August: Product judging
- 19 October: Gala Awards Dinner held at the Rugby World Cup Centre at the Viaduct Basin in Auckland

To find out more, contact Allan McBride.
tel: 06 350 5175 email: foodawards@massey.ac.nz

Massey University has been supporting New Zealand's food and beverage industry for more than 80 years and has an ongoing commitment to provide innovative solutions for the world's food needs.

Tasty Pot Company Operations Manager Anthony Light and owner Andrew Vivian with their award-winning product bearing the NZ Food Awards mark. Auckland-based Tasty Pot Company triumphed over 80 other entrants at the Gala Awards Dinner in October.



Full moon fever

Maurice Collins has been awarded the prestigious Murray Geddes Prize by the Royal Astronomical Society of New Zealand.

Collins, currently a bioinformatics technician at the Massey Genome Service, says he was surprised to receive the award. "It's great that my work was recognised, as this award has been won previously by some of New Zealand's leading astronomers. I'm very honoured."

Collins has been fascinated by the moon since childhood, photographing it many times over the years using a home telescope.

He has unofficially named a 630-km-long ridge he discovered on the Moon after his daughter Shannen. He also produces supersaturated colour images, which bring out the true colours of the Moon.

Earlier this year Collins and his colleague Dr Charles A (Chuck) Wood presented their work *New Light in Old Basins* at the 42nd Lunar Planetary Science Conference in Houston, Texas.

A supersaturated image of the moon shows basaltic lava flows containing high amounts of titanium in bluer shadings and low-titanium basaltic lava flows in redder shadings.

Bachelor of Natural Sciences launches

The Albany campus is to offer a new science degree, the Bachelor of Natural Sciences. Based around inquiry-based learning, the new degree is strongly endorsed by Vice-Chancellor Steve Maharey. "It will provide knowledge across natural science disciplines and the flexibility to study beyond the classical science subjects in areas such as sociology of science, sustainability, philosophy and project management. It will produce a new breed of scientists able to address the most pressing issues the world faces – things like biosecurity, food and water shortages, and global warming."

Professor David Raubenheimer, the degree's programme director, is a nutritional ecologist whose exploits have an Indiana Jones cast to them. In remote regions of Nepal, China and Uganda Raubenheimer has tracked tigers, snow leopards, blue sheep and mountain gorillas, analysing their interactions with human communities.

Joint Lincoln and Massey Centre of Excellence

With the support of the Government's Primary Growth Partnership programme and of DairyNZ, Lincoln and Massey Universities have launched the Centre of Excellence in Farm Business Management. The joint venture will supply research, education and professional development directly relevant to the needs of the agriculture industry, emphasising areas such as risk management, governance, financial control, people management, entrepreneurship and precision agriculture. Officiating at the March launch were Chief Executive DairyNZ Dr Tim Mackle, Lincoln University Vice-Chancellor Professor Roger Field and Massey University Vice-Chancellor Steve Maharey.



Spatial design student **Ana McGowan** has won first prize in the theatre architecture section of the Prague Quadrennial on Performance Design and Space with her entry *In New Ruins*. Entrants were asked to design a theatre space for a performance to take place within St Anne's, an ancient deconsecrated church in Prague. McGowan's entry features a flexible structure made of scaffolding, with towers being erected during the performance. Her work was chosen from 180 entries from 44 countries.

The win carries a cash award of around NZ\$10,000 and means she will join the small group of Massey staff and students at the Quadrennial in June. Massey spatial design lecturer **Stu Foster** is the curator and designer of the national student exhibition, which showcases the work of six postgraduate students, two of whom – Sarah Burrell and Ian Hammond – are also from Massey. Two other Massey postgraduates, Lauren Skogstad and Emma Ransley, will represent New Zealand with works featuring in the extreme costume exhibit for professional designers.



Small business owners turn to credit cards

More small business owners are turning to personal credit cards to finance their companies.

Massey's Centre for Small and Medium Enterprise Research surveyed 1808 small and medium-sized firms as part of a study to find out how they were coping with the recession.

More than three-quarters of the respondents (78 percent) said they were now using credit cards – an increase from 67 percent the previous year.

This makes personal credit cards the most widely used form of business finance alongside trade credits.

"These findings reflect the fragile nature of the recovery as the recession continues, with businesses not wanting or not able to access bank loans," says centre Director Professor David Deakins.

"For a business owner, a credit card is a relatively flexible way to finance cash flow and meet working capital requirements.

"There is a risk they may get bad debt – particularly in times of recession – but if it helps cash flow in a temporary period it could be a good solution."

The study also found that a quarter of business owners surveyed had invested personal savings into their companies last year. However, this has remained fairly stable: 27 percent in 2009, 25 percent in 2010.

Deakins says owners of firms that were not growing had stopped investing personal savings into their businesses, indicating that some had exhausted that option of finance.

The study also found that companies were still feeling the effects of the recession, with only 14 percent reporting they had not yet been affected, compared with 27 percent the previous year.

The annual **BusinessSMEasure** survey is a yearly longitudinal study of small and medium-sized firms in New Zealand.

Honours



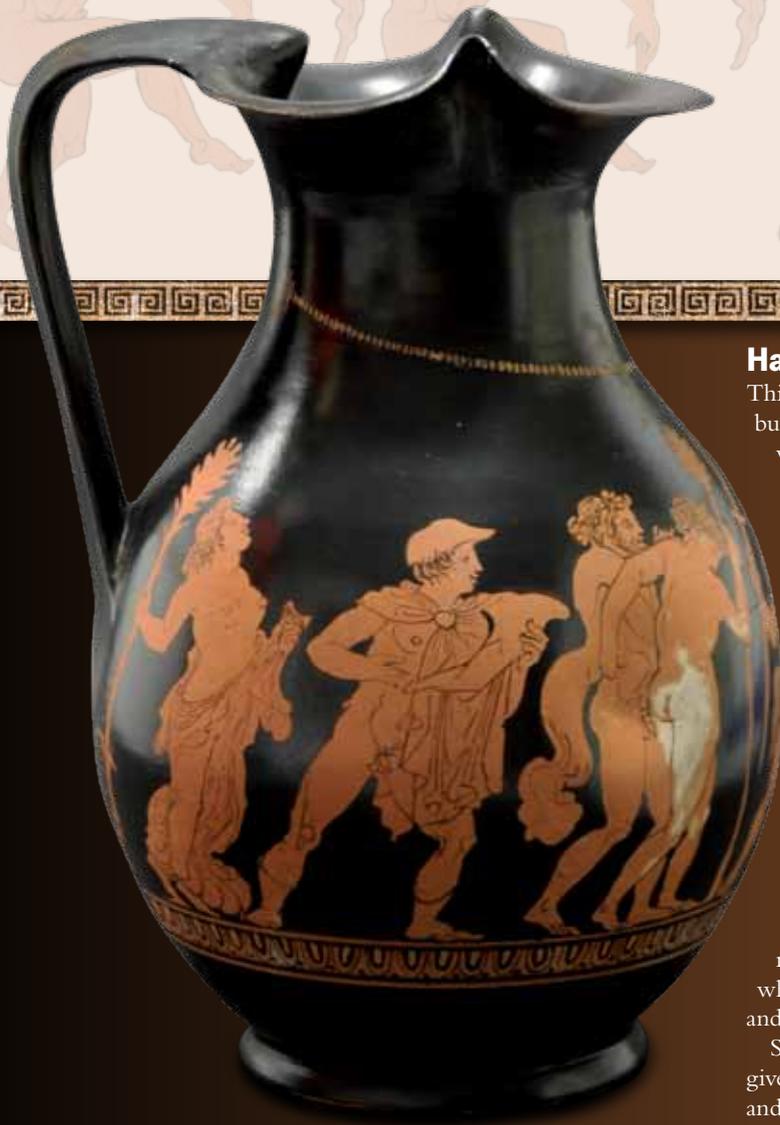
Professor **Glenda Anthony** has been awarded the Fulbright-Harkness New Zealand Fellowship. Anthony will use the fellowship to further her research in mathematics education, particularly how best to teach teachers. The fellowship will take her to the University of Michigan, the University of Washington and the University of California Los Angeles.



Emeritus Professor **Glynnis Cropp** has been awarded the rank of Officer of the *Palme Académiques* by the French Ambassador to New Zealand in recognition of her academic reputation, teaching and research.



Professor **Stuart Carr**, an industrial and organisational psychologist, and his former colleague **Dr Ishbel McWha** (now with Cornell University) have been awarded special medals, called presidential coins, by the Society for Industrial and Organisational Psychology. Presented at the society's Chicago Conference, the coins recognise "exemplary and extraordinary behaviour in support of science and practice". Carr co-led Project ADD-UP, an influential three-year study of the pay discrepancies between local and expatriate workers in aid, governmental, educational and business organisations in 10 countries. The project found that on average expatriate workers were paid four times more than local employees for similar work, and that the discrepancy was deeply harmful and counterproductive. Carr will next examine the impacts of pay discrepancies within New Zealand's business, commercial and government sectors, where some chief executives receive multi-million-dollar salary packages that are many times greater than those of most of their staff.



Hands-on history

This is not pottery for prudes. Around the perimeter of one heavy, burnished pottery jug, nymphs and satyrs disport themselves in various states of undress and inebriation.

Another piece, an erotic cup, is more explicit: it has a phallus for a spout.

A third, a jug better suited to family viewing, carries one of the earliest known examples of the use of the Greek alphabet, the inscription “whoever of the dancers now dances most lightly, to him this [vessel as his prize]”.

The culture of ancient Greece is at once familiar and deeply foreign.

The originals of each of these works are held in exhibits around the world and can be handled only by conservators.

But if you are on Massey’s Manawatu campus there is another option. Ask Senior Lecturer in the School of History, Philosophy and Classics Dr Gina Salapata nicely, and she will open the glass case just outside her office and carefully hand you a replica that is as near as one can get to the real thing.

The replicas come from the Tanya Jermaine collection, named in memory of the daughter of Alan and Ann Jermaine, whose donation funded its purchase. It includes cups, jugs, bowls and teapots.

Salapata carefully selected the specimens. “The pieces we’ve chosen give us an insight into ancient Greek life and values in a very practical and engaging way. The functional and aesthetic qualities of each item reflect the attitudes and purpose of the design, and the story behind it.”

These are no tourist knock-offs. “The vases have been produced by the Thetis Authenticity workshop in Athens using the very same materials and techniques employed by the ancient Greeks themselves,” Salapata explains. “One piece has been produced in separate pieces to illustrate the various clay-firing stages of production – used to create colour – and another has been deliberately broken to allow students an opportunity to piece it back together based on their understanding of the design.”

The collection is complemented by a custom-made display cabinet, designed by Massey Museum Studies staff, and by a web-based interactive multimedia presentation and an iPad app put together by the National Centre for Teaching and Learning.

Allowing for the occasional unavoidable breakage, the replicas will be handled by generations to come of classical studies students.

Alan Jermaine is pleased. “I am overwhelmed by what everybody involved in the project has been able to achieve and stunned that it has gone digital. Now when I get home, I have to buy an iPad, because it’s something we simply have to show the whole family!”



For a multimedia presentation featuring the Tanya Jermaine collection, visit <http://bit.ly/iwPZoR>, for a youtube video go to <http://youtu.be/6NJ7BitvTHw>, or to find out about enrolling in classical studies go to <http://tinyurl.com/3qsaxud>.



A lasting gift

It is surprising how many people are interested in the goings-on of the ancient Mediterranean world. More than 30,000 secondary school pupils enrolled in NCEA-level classical studies last year. Why the interest? Ask alumnus Alan Jermaine, who first studied classics at Massey in 1975 (he chose Greek literature, enjoying it so much he persuaded his wife Ann to take the subject the following year), and he will explain why it still resonates for him and others.

“There are so many things I like about classical studies. First there is that historical link: that I am what I am today because there was a Greek civilisation. People enjoying Western civilisation – of whom I am one – cannot escape their debt to Greece and to Rome. I am fascinated by the fact that the people of those days were so much like us – or is it vice versa?”

While on a six-month study award in 1996, Alan and his wife Ann, both teachers, spent time in Europe studying the ancient world.

“A new world opened for me,” he says. “I spent a lot of time in rooms featuring a huge variety of Greek vases and I thought this would be a worthwhile [subject of] study if I found the right course. In 2002 I found that Massey offered a course with Greek vases as a centrepiece – Greek Art and Society.”

Alan took the course, studying under the tutelage of Dr Gina Salapata – and he discovered through the internet that there were firms crafting faithful reproductions of the vases they were studying. During his travels he had witnessed the power that contact with a physical artefact can have in bridging time and distance.

“In Cambridge, I stumbled across the Museum of Classical Archaeology, where more than 400 plaster casts of ancient statues were on display. The collection was visited by primary and secondary school parties, as well as groups of university students, who were obviously learning something from them. They looked identical to the real thing – and unlike the originals they could be touched.”

Perhaps, he thought, the use of replicas could bring an extra dimension to teaching classics at Massey. “I talked to Gina and found the university was most enthusiastic about having a teaching collection. I started knocking on doors to raise money for a collection – unfortunately, as the recession hit. The timing was dreadful.”

Then came a personal tragedy: Alan and Ann Jermaine’s loss of their dearly loved daughter Tanya. Their response was to fund the purchase of a teaching collection themselves, creating an enduring gift.

“We wanted to keep her memory alive in a way that was meaningful to her family, and also to others. It’s wonderful to know that Tanya’s memory will live on through these beautiful objects that serve as valuable teaching tools.”

Alan Jermaine is Head of Principal Appointments with Blackcat Education – a specialist recruitment consultancy that provides a focused, professional service handling school principal and other senior management appointments within New Zealand education. His career includes the principalship of four schools: a contributing school, two full primaries and an intermediate. He received a QSM in 2006 and is the founder of Education Today magazine.

Appointments & arrivals



Dr Alison Paterson has been elected Massey University Pro-Chancellor, replacing Stephen Kos of Wellington, who stood down from the university council after being appointed a High Court judge.



Toronto-based composer Juliet Palmer arrives in New Zealand in late July to take up the Creative New Zealand/ Jack C Richards Composer-in-Residence at the New Zealand School of Music.



Tony Parsons, formerly of AgResearch, has been appointed to the Chair in Grassland Science at the Institute of Natural Resources. Professor Parsons is known for his work on carbon cycling and sequestration in pastoral ecosystems, the risks and opportunities of new organisms and traits, and modelling the interactions between animals and plants.

PUBLIC LECTURES, OPEN DAYS & EXHIBITIONS

Albany

27 July 6pm–8pm: **Prof. Paul Spoonley – Changing Mediascapes** The arrival of significant Asian immigrant communities after 1990, and especially since 2000, has had a major impact on the media in Auckland, in terms of both mass or mainstream media and the appearance of new side-stream media that cater to specific ethnic/immigrant/linguistic communities. New print and broadcast media have appeared alongside digital and online options. Part of the *Asia Hub* series, this seminar will explore the nature of the media landscapes of the 21st century, especially in relation to Asian communities and connections. It will explore such questions as:

- What do these Asian-influenced or related media outlets and practices look like?
 - What are the implications for the mainstream/mass media?
 - And what are the implications for public debates and understanding?
- Massey University Albany Campus, State Highway 17, Albany

13 Aug. (Saturday) **Albany Campus Open Day:** An insider's view of what it is like to study at Massey, with college presentations, tours, lectures, interactive displays and activities all on offer.

21 Aug. (Sunday) **New Zealand School of Music Gala Performance,** featuring Steve Houghton on drums, Bob Sheppard on saxophone and Alex Sipiagin on trumpet. Atrium Round Room. For information, visit the NZSM website, www.nzsm.ac.nz, or contact NZSM Jazz Festival, Sarah Smythe: email jazz@nzsm.ac.nz, tel: 04 801 5799 ext 62440.

15 Sep. (Thursday) 12.00 noon: **Ian Wedde** speaks as part of the Albany Writers Read series, Study Centre Staff Lounge.

Manawatu

22 July **Brian Turner** speaks as part of the Palmerston North Writers Read series*

3 Aug. (Wednesday) **Manawatu Campus Open Day:** An insider's view of what it is like to study at Massey, with college presentations, tours, lectures, interactive displays and activities all on offer.

19 Aug. **Lloyd Jones** speaks as part of the Palmerston North Writers Read series*

30 Sep. **Kate de Goldi** speaks as part of the Palmerston North Writers Read series*

* The Writers Read readings start at 7pm in the Palmerston North City Library. Join us from 6:30pm for free drinks and nibbles and a chance to meet the visiting writer. A Q & A follows each reading.

Wellington

16–25 July, Mon–Fri 10am–5pm, Sat/Sun 10am–4pm: **Germany for Beginners – an international touring exhibition of spatial typography works from Germany,** sponsored by the Goethe Institut, Tea Gardens, Massey University Museum Building, Buckle Street, Wellington

16–28 July, Mon–Fri 10am–5pm, Sat/Sun 10am–4pm, NZSO **Photography Exhibition – showcasing photographic works by Master of Fine Arts graduate Olivia Taylor taken during the NZSO 2010 European tour.** Great Hall, Massey University Museum Building, Buckle Street, Wellington.

4 Aug. 6pm: Authors **Selina Tusitala Marsh, Lynn Davidson** and **Lynn Jenner** read from their works as part of the Wellington Writers Read series. A Q & A and reception will follow the reading in Theatre (10A02), Museum Building, Massey University, Buckle Street, Wellington, Entrance D (access theatre from east side of building).

For up-to-date information about Massey events, visit <http://events.massey.ac.nz>.



Where do you wear yours? Win an iPad 2 in a very special T

The College of Creative Arts has released a limited-edition t-shirt to commemorate its 125th Anniversary year. These are available in a range of bright, fun colours (and the ubiquitous designer grey of course!). We challenge you to send a photo of yourself wearing your 125 t-shirt in the most CREATIVE PLACE. That's it. If our skilled group of tasteful judges think you've come up with the best idea, you win.

Take a photo of yourself in your t-shirt and submit it along with your name and location description to creativearts.events@massey.ac.nz.

Entries close on 1 September 2011 and the winner will be announced at the launch of the 125th Anniversary Exhibition of Art and Design.

You can enter more than once as long as your locations are different! See our website creative.massey.ac.nz for terms and conditions and to see the gallery with all the entries!

To purchase your t-shirt, please contact Massey Alumni Relations at alumnishop.massey.ac.nz.

19, 20 Aug. NZSM Jazz Festival, Wellington Town Hall, Wellington
 Alongside Rodger Fox, NZSM Jazz staff and senior students, the festival, which features workshops and masterclasses, will feature three leading jazz exponents from the US: Steve Houghton on drums, Bob Sheppard on saxophone and Alex Sipiagin on trumpet. A public **Gala Concert** will be held on the Friday evening. For information, visit the NZSM website, www.nzsm.ac.nz, or contact NZSM Jazz Festival, Sarah Smythe: email jazz@nzsm.ac.nz, tel: 04 801 5799 ext 62440.

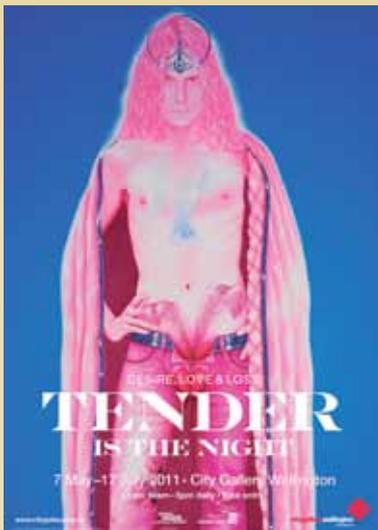


26 Aug. Wellington Campus Open Day: An insider's view of what it is like to study at Massey, with college presentations, tours, lectures, interactive displays and activities all on offer.

Mid Sep. – Nov. Mon-Fri 10am-5pm Sat/Sun 10am – 4pm **College of Creative Arts 125th Anniversary Exhibition of Art and Design**, Great Hall, Massey University Museum Building, Buckle Street, Wellington.

29 Sep. 6.00pm **Kate de Goldi** reads from her works as part of the Wellington Writers Read series. A Q & A and reception will follow each reading in Theatrette (10A02) Museum Building, Massey University, Buckle Street, Wellington, Entrance D (access theatrette from east side of building).

Currently on show at the City Gallery are the exhibitions *An Expanding Subterra*, works by Associate Professor Wayne Barrar, and *Tender is the Night*, curated by Head of Fine Arts Heather Galbraith and featuring a number of works by Massey staff and alumni, including, notably, Professor Anne Noble.



Honorary Doctorates



Fashion designer Kate Sylvester has been awarded a Doctorate in Fine Arts. The degree recognises her contribution to New Zealand's economy and enhancement of New Zealand's creative fashion industry internationally.



Former Chief of Defence Forces and Governor-General Designate Jeremiah (Jerry) Mateparae has been awarded an Honorary Doctor of Literature Lieutenant-General Mateparae (Ngāti Tūwharetoa, Ngāti Kahungunu) has had a long association with the university and supported its provision of professional military education for nearly a decade.



Veteran New Zealand political journalist Ian Templeton has been awarded a Doctorate of Literature. The degree recognises his contribution to journalism, the parliamentary press gallery and the establishment of the New Zealand Press Council.



Sir Richard Taylor has been awarded the degree of Doctorate in Fine Arts. The degree recognises the contribution he has made to the New Zealand film industry and the Wellington creative community.

The price of fish...



Massey University teaches in and researches very many aspects of the food value chain, from paddock to plate, block to bowl and cow to cone. We don't look at fish (except in conservation and ecology terms) but we do know at least some of the reasons for it appearing to be more expensive than in the past.

We also know that in real terms, fish, as well as other foods, is cheap as a proportion of income in comparison with the past. It is also likely to increase in price in future because of the increasing demand for animal protein, economic growth/inflation pressures and the costs of fuel and labour.

Lecturers, scientists and researchers at Massey continue to investigate ways to ensure that food production is efficient and sustainable. We work with people in other institutions to develop the systems and people for the future – and although food is likely to continue to increase in price, we are making a difference in terms of efficiency and sustainability. We are also working to try to explain the realities to society – that with a New Zealand Food Inc. approach, we will be able to be clean, green and productive.

Dollars

The fact that food is cheap appears to contradict the impact on the wallet each shopping expedition. It is certainly true that the number of cents and dollars that the shopper has to hand over at the checkout is greater than in the past. When adjusted for inflation, however, two litres of milk in 1999 would, in today's money, cost \$3.87. In 2009 two litres cost \$3.48, and in the supermarket in February, two litres of supermarket-brand milk cost \$3.60, yet the fuss about increasing prices resulted in Fonterra freezing the price and moving further into social welfare (the company has been doing breakfasts in schools for several years). Similarly, a kilogram of sausages in 1979 cost in today's money \$7.74, in 1989 was \$6.17, in 1999 was \$6.02 and in 2009 was still only \$7.03, despite an increase of at least 40 percent (according to Statistics New Zealand) in the costs of production.

Of further consideration is that in New Zealand the average increase in food price has not been as great as the average increase in salaries... Sky-rocketing food prices a couple of years ago actually put only \$15 on the average weekly food basket costs. The Statistics New Zealand Household Economic Survey released at the end of last year showed that between the end of June 2007 and 2010 average weekly household expenditure increased from \$163 to \$178. As a proportion of average weekly household income, food was 12.3 percent in 2007 and 12.1 percent in 2010.

Some of the decrease reflects people buying house brands and cheaper cuts, but the overall impact is that people still have proportionately more to spend on things other than food. On average, Kiwis over 18 spend \$5 a day on impulse (which means \$16 million a day) in contrast to under \$10 a day on supermarket shopping for actual food.

The suggestion that 'food should be cheaper in New Zealand because we grow it' overlooks salary and wage increases, customer preference (a year-round availability of good-quality and cheap food), market size (the domestic base is small) and trade agreements (free trade means accepting food from other countries). It also overlooks the point that over 40 percent of food consumed in New Zealand is imported.

Increased demand for New Zealand food

New Zealand has high standards in terms of food quality and environment. Increasing legislation surrounds the use of chemicals (such as pesticides, fertilisers and growth-promoting compounds) that assist in optimising growth rates of the desired product. There is also increased legislation around human (minimum wage, holidays and ACC) and animal welfare. All of these protection mechanisms assist in underpinning exports to elite markets, but increase the cost of food production in New Zealand.

Acknowledging that the bulk of purchases are made on cost and perceived value, many developed countries subsidise domestic products in an effort to protect local farmers from cheap imports. Subsidies are also used, for example in Europe, to support the implementation of new technologies. New Zealand, however, doesn't do subsidies in primary production: they were removed in the 1980s. The benefit is that productivity in agriculture has increased: New Zealand farmers and growers are efficient and the high-quality, trusted food they produce is in demand. Legislation and restrictions actually help New Zealand tick the boxes in what customers say they want.

Natural capital

Improving efficiencies and sustainability is a major challenge requiring research into soils, plants, animals, water and the atmosphere. The concept of natural capital is bringing at least some of these aspects together in an holistic but quantifiable fashion. Natural capital (which is an extension of the concept of manufactured capital or infrastructure capital used in economics) refers to environmental goods and services. It has been defined as the stocks of natural assets (such as soils, forests, water bodies) that yield a flow of valuable



2 litres of milk
(Price adjusted for inflation)

1999	\$3.87
2009	\$3.48
2011	\$3.60



1kg of sausages
(Price adjusted for inflation)

1979	\$7.74
1989	\$6.17
1999	\$6.02
2009	\$7.03

ecosystem goods or services into the future. Internationally, ecosystem services is a high-priority topic owing to the growing awareness that the environment and the economy are fundamentally interlinked. Ecosystem services is a way of quantifying and incorporating what we implicitly value in the environment into production and governance practices.

Drs Alec Mackay (AgResearch and Massey University Honorary Research Associate) and Brent Clothier (Plant and Food Research and Adjunct Professor with the Life Cycle Management Centre at Massey) are leaders in work on ‘natural capital’ – valuing soils based on the ecosystem goods and services they provide. The concept of soil natural capital incorporates nutrient supply, mineral resources, filter and reservoir functions, structure, climate regulation and biodiversity conservation. Marginal land, or land with little natural capital, requires additional inputs (eg, fertiliser, irrigation, drainage, animal feed pads and herd homes) to compensate for the lack of soil services. New Zealand has been very successful in the development and implementation of these production technologies. These inputs increase the costs of production, but have been accepted in the past – land development has focused on removing limitations. The effects, however, have not always been borne by developers, and have not been incorporated into food prices. Erosion and increased nutrient concentrations in water are classic examples. How much would it cost to stabilise land and to clean up waterways? The addition of costs through the inclusion of mitigation technologies provides the basis on which to start valuing the natural capital of the soil and, by implication, increases the value of elite and versatile soils that do not need extra inputs or work.

Estelle Dominati, a PhD student working with Dr Mackay and Professor Murray Patterson (Ecological Economics Research Centre, Massey University), has developed a framework that enables quantification and valuing of the ecosystem services of soils. She has calculated that on a good dairy soil, for instance, the value of the ecosystem services far outweighs the income from milk. Incorporating the ecosystem service value in the price of milk, in order to ensure sustainability, would have a marked effect on affordability.

Ecological economics also provides a basis for capturing the cultural, heritage and spiritual services provided by land. These are particularly important to iwi and to the tourism industry and must also be considered in any decision on land use and land use change. An evaluation of different options is vital to ensure efficiencies in production, with the aim of achieving sustainability and ‘reasonably priced’ food.

Word of mouth

Last year, McKinsey & Company identified the top three factors in developing markets in considering a product at each stage of the consumer decision journey. At initial consideration, active evaluation and moment of purchase, word of mouth is more important than advertising. In fact, over 90 percent of people trust word of mouth more than any other source of information. Add this to the concept of brand (which is, according to UK research, worth five times more than advertising) and it is clear that New Zealand’s reputation is worth a considerable amount – our export economy, in fact.

New Zealand needs to move into supporting its own. This is not the time for tall poppy knocking or being clever by pointing out the realities – when it might be only a small proportion of the whole. We do have problems, eg, some waterways, but by international standards we rate very highly environmentally. Only by going on supporting our clean, green image internally will we be able to command the premium prices needed to allow our farmers to do an even better job in the future.

The challenges

The costs of production are unlikely to decrease in the future. Where energy inputs are used intensively (fertiliser, for instance), costs will escalate. New Zealand’s strength is in the pasture-based system involving legumes. By supporting research, implementing what is practicable and showing that sustainable production is being achieved with due consideration of animal and human welfare issues, New Zealand agriculture is leading the way. Given current understanding – in current markets, developing markets and among agribusiness professionals and farmers – it should be a relatively easy move to market New Zealand Food Inc. internationally... as long as consolidation (to give critical mass) and traceability (to indicate provenance) are achieved. The rewards will be in premium prices resulting in improved income flow, which will enable expenditure on systems and technologies that in turn improve sustainability. Support from society is extremely important in the brand and word of mouth. Everybody has a part to play in New Zealand Food Inc. Your ‘clean, green and productive’ country needs you to spread the word.

Jacqueline Rowarth is Professor of Pastoral Agriculture and Director, Massey Agriculture. ■



Brewmeisters

Two friends who studied food technology together 25 years ago have devised a machine to bring joy to the hearts and palates of well heeled homebrewers. Ian Williams and Anders Warn talk to Bevan Rapson.

Homebrew can be a heartbreaker. After paying out for equipment and ingredients, a homebrewer has to invest precious time in cleaning buckets and bottles, meticulously measuring and mixing, checking the brew's temperature as if it's an ailing infant, waiting patiently, then bottling and waiting again.

And then, on the day that it's finally supposed to be ready, the first cap is opened and all too often it's obvious that something has gone wrong. It's flat or too fizzy. Or tastes so bad it's undrinkable. Or, worse, remains just drinkable so the brewer, and their more loyal mates, have to work their painful way through the batch until it's finished. At which point only the most determined enthusiast is investing all that time and money into another brew.

This kind of experience is horribly common. It's claimed that nearly a third of New Zealand men have made homebrew beer but only a fraction of them continue to do so.

That simple statistic has helped propel the creation of an all-in-one personal brewing machine, devised and developed by two friends who studied food technology at Massey University back in the 1980s.

Ian Williams and Anders Warn believe their WilliamsWarn personal brewery, launched in April, solves the problems faced by millions of homebrewers around the world – and plenty right here in New Zealand.

They have so far sold fewer than a dozen of the \$5660 machines locally, but Ian Williams reports an “amazing” response internationally, with 90,000 visits to the WilliamsWarn website and distributors around the world clamouring for a chance to sell the machine in their home markets.

Aucklanders Williams and Warn were schoolmates at St Kentigern College and were both inspired by a Massey presentation to go into food technology. “A food tech guy came to our school and gave a lecture on what Massey was doing with technology, particularly food technology. We were sitting next to each other at the back of the class and we just thought, ‘Well, there’s always going to be food.’”

They and another classmate all headed to Massey the next year. Williams has fond memories of his years there, first living at Kairanga Court, then flatting with Warn in Morris Street and Featherstone Street, and making friends who are still part of their social circle today. Yes, beer was

an interest even then, with the students' traditional Friday and Saturday night sessions at 'the Fitz', although Williams suggests they "weren't as bad as the Dip Ag guys".

He even made his first and only homebrew at Massey, with a couple of other food tech students, using a 40-gallon drum. "As much as we tried to convince ourselves it tasted great, it was awful," he recalls. "Never did it again."

Warn, who graduated with first class honours, went on to work in food processing, working in Europe for Tetra Pak as a systems and project engineer then returning to join New Zealand Dairy Foods, managing a production facility. He later became a consultant, working for Fonterra and Sealord among other companies. Today, he works for Fonterra as Business Process Manager.

Williams, who studied wine in his final-year project at Massey and had opportunities in that field, opted to join DB as a trainee brewer. He identified better travel opportunities in the beer world. Trained by DB, he worked at Tui as an assistant brewer, was head brewer at Monteiths, and by sitting exams became the first Master Brewer in New Zealand. Then, taking advantage of DB's Heineken connection, he left New Zealand in 1995 to work in Holland, then in the Tiger brewery in Singapore. That led to helping launch a new Tiger brewery in Hainan, China where he oversaw the production of an international prize-winning lager.

By 2000, Williams had become an international brewing consultant, based in Denmark but working in many different countries and helping large breweries improve their performance and beer flavours.

In 2004, a chat about homebrewing with his uncle at a Christmas party got Williams thinking about why amateur beer makers were so often unsuccessful. Two years later he was ready to bring his family back to New Zealand and get to work on making an all-in-one brewing machine that he believed could solve the inherent problems suffered by homebrewers.

That was when he approached Anders to help with the engineering side of his fledgling project.

It has been quite a journey since then, with Williams sinking his own money into the project, then bringing other investors on board in exchange for a share of the company.

Initial market research established the potential of the idea, and a prototype self-carbonating, all-in-one machine was successfully produced in 2007. Unfortunately, this original machine blew up when yeast burst into the electrics during a yeast discharge process.

An improved prototype was built, patents obtained and investment won from Dane Michael Hansen, former owner of a family brewery in Denmark.

By the end of 2009, two New Zealand manufacturers had been found to help build a third prototype, which was completed in April last year, but by mid-year further investment was needed to get the product to market. A shareholder in the Hawke's Bay manufacturer involved in the project came forward with a capital injection in exchange for a stake in the business. The project has also been backed by funding from the Ministry of Science and Innovation's business support programme.

With only 50 machines made so far, Williams says the project is in a six-month trial period locally, with a plan to secure further investment and launch in the US by Christmas. "We've had big retail stores in the States ask if they can retail it," he says, "so that's where we want to go now."

In future, he believes the manufacturing costs will fall as economies of scale are achieved and that the company is positioned to profit both from unit sales and from selling consumables to machine owners. "There's such a gap in this market," he says.

"The number of ex-homebrewers is really high. They've always wanted to make good beer but haven't been able to before."

The WilliamsWarn machine makes 23 litres of beer in seven days, at a cost of around \$7.50 for the equivalent of a dozen 330ml cans. It eliminates a lot of the waiting from homebrewing, and also the work. Williams says the first problem for traditional homebrewers is that they have to use a two-stage process. One advantage of

his brewing machine arises from it being pressurised, meaning the beer doesn't have to be recarbonated in a second fermentation. The machine closely controls the brew temperature with a refrigerator and heater and incorporates a simple clarification system.

While the machine is being launched with three beer varieties – a Summer Ale, Blonde Ale and American Pale Ale – it has the potential to make all sorts of beer and for users to experiment and create their own versions of classic styles.

So do Williams' old colleagues in the brewing industry see his invention as a threat to their sales? "I haven't heard from them yet, actually," he says. In any case, his interest has shifted away from their world. He has a different mission these days: "I want to solve the problems in homebrewing." ■

He even made his first and only homebrew at Massey, with a couple of other food tech students, using a 40-gallon drum. "As much as we tried to convince ourselves it tasted great, it was awful," he recalls. "Never did it again."



TOOLS OF TRADE

In a world of green screen rooms, laser cutters and the latest in computers and software, some places retain an anachronistic charm. The College of Creative Arts' Type Workshop is one. If Gutenberg, the inventor of moveable type, were to be resurrected from his 15th-century grave, he would instantly recognise the technology in use. Here students learn about the art and craft of typography – terms like leading, kerning and letterspacing – and the physicality of printing in a way no computer can match.



①



②



③

① Moveable metal type was introduced by the German watchmaker Johannes Gensfleisch zur Laden zum Gutenberg around 1439 and was in regular use until quite recent times. These days, sets of metal type are more often found among antique store bric-a-brac than in use.

② The wooden type shown here would have been cut using a router, a technology introduced in the 1830s. ③ Today the Type Workshop cuts its wooden typefaces using a computer-guided laser cutter.

Annette O'Sullivan lectures in typography and teaches a contemporary letterpress and teaches a contemporary letterpress paper in which students combine digital and traditional technologies, researching their subjects to arrive at the right mix.

This large-format cylinder proofing press – made by T. H. Pullan and Son of Glasgow – is leased from the Wellington Printing Museum. The press is used to print posters from laser-cut or locked-up printing 'formes'.



John Clemens lectures in printmaking and screenprinting and runs such high-tech marvels as the plotter cutter used to cut vinyl stencils and the laser cutter used to custom produce wooden type.

Wooden type locked up into a metal frame known as a 'chase' ready for inking and printing. In this case, the paper is placed over the top of the forme – the filled chase – which is then positioned under the press ready for printing.

The Albion press, originally designed and manufactured in London by Richard Whittaker Cope, was manufactured from 1820 until well into the 1930s. The date of this model is unknown. Its mechanism resembles that of Gutenberg's original press, which was itself modelled on that of a wine press. Like the cylinder press to the left, the Albion is on loan from the Printing Museum.



Andrea O'Neil talks to the man New Zealand Listener declared to be New Zealand's most influential figure in agriculture, Landcorp Chief Executive **Chris Kelly**.

Forget the finance sector, forget tourism, forget *The Lord of the Rings* – New Zealand's economy will stand or fall on the merits of its agriculture, says Chris Kelly. "Agriculture is going to have to be the export-led recovery that saves this country," he says. "At the end of the day we're so bloody small, the only game in town is what we're good at, and that's converting grass into wool, meat and milk."

It's a game Kelly knows well. For the past decade he has been the Chief Executive of Landcorp, the state-owned enterprise that is New Zealand's largest farmer.

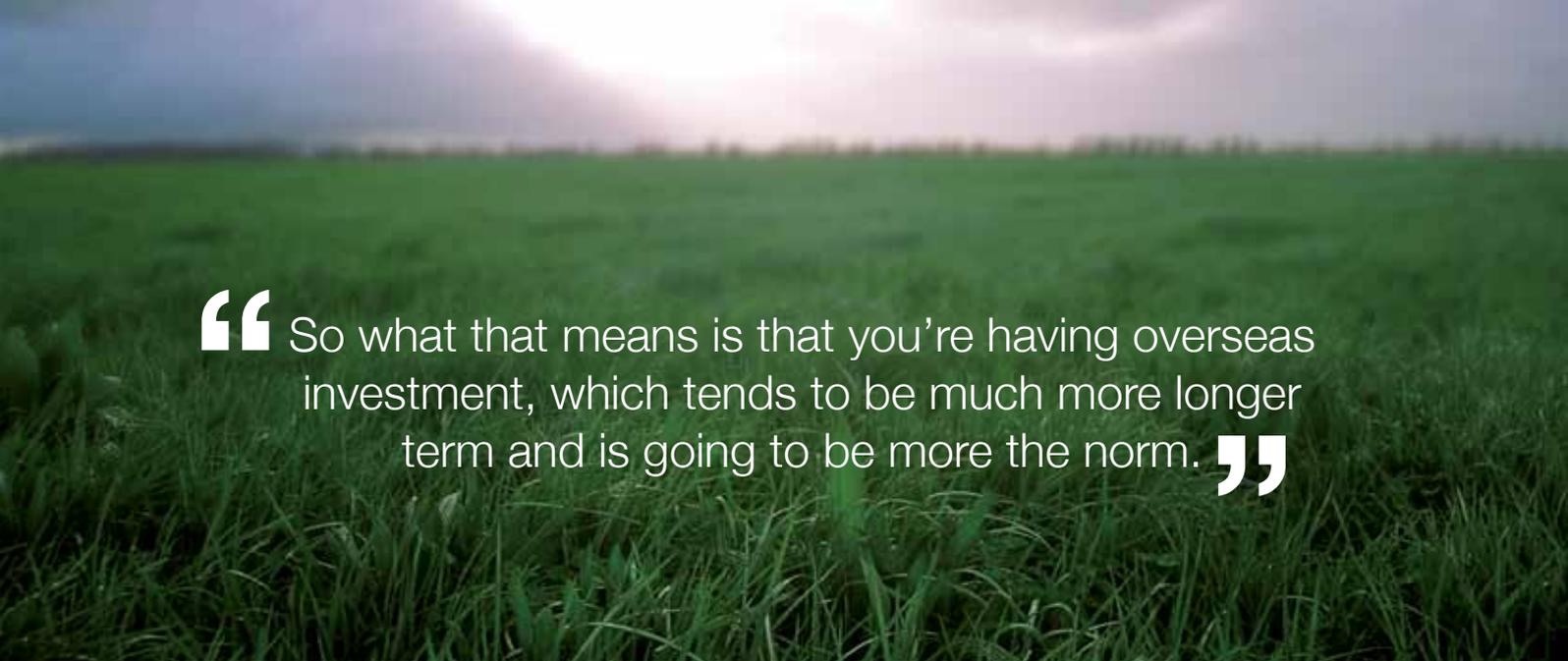
Landcorp owns or leases 374,898 hectares of land, employs 584 staff and controls assets worth \$1.5 billion. In its portfolio are 105 properties and around 1.5 million stock units.

It is large enough to lead – and to be noticed. During Kelly's tenure Landcorp has often been in the news: 2003, the decision to phase out sharemilking; 2007, the Māori occupation of disputed Landcorp holdings in Coromandel and Northland; 2009, the halt on conversion to pasture of Fletcher forests land due to Emissions Trading Scheme (ETS) restrictions; 2010, the bid for the notorious Crafar farms.

"I joined Landcorp at an interesting time in the genesis of the company," Kelly acknowledges. The company was formed out of the old Department of Lands and Survey in 1987. The then-Labour Government originally intended to sell Landcorp along with its other assets, and for years the company's potential was frustrated by its supposedly imminent sale. By the time Kelly took over in March 2001, a new Labour Government had very different views on the sale of state assets. "For the first time in Landcorp's life we were able to stabilise and talk about 'strategy' and 'growing shareholder wealth' and those sorts of things."

Kelly came to Landcorp from the New Zealand Dairy Board, and his first years at Landcorp were spent fighting a power struggle to change the culture of what he discovered was a bloated and uncommunicative entity. He ended up forcibly centralising Landcorp at its current Wellington headquarters. "I just about tore my hair out for the first three or four years trying to get a 'one company' culture. I failed miserably. So overnight I decided to close the Christchurch office and close the Rotorua office."

His early policy changes were also met with resistance from within the company, such as his



“ So what that means is that you’re having overseas investment, which tends to be much more longer term and is going to be more the norm. ”

promotion of dairy farming alongside Landcorp’s traditional sheep and beef focus. “There was some scepticism as to whether this silly Mr Kelly had got a bunch of dumb ideas trying to do this. But over time that changed.”

Dairy and deer farming now make up half of Landcorp’s revenue, and this sea change, along with a tripling of animal numbers per hectare, has generated some impressive national statistics – New Zealand supplies 40 percent of the world’s traded milk and 90 percent of its deer meat. We also supply 70 percent of the world’s mutton, but Kelly says New Zealand’s drystock farming, sheep and beef, is in dire financial straits – there’s just no money in it compared with the now wildly popular dairying. “I still believe that there is a big future for the red meat industry,” he says. “We can’t all be big dairy farmers, that’s just absolutely impossible. But we need a paradigm shift to make our sheep and beef farming more profitable.”

His solution for resurrecting drystock farming? Well funded research. Landcorp and its shareholder, the Government, have invested more than \$100 million since 2004 in researching genetics, feeding and the international market. “We’re big enough to spend money on lots of new initiatives and if we make a mistake at times, it doesn’t break us as a company. Individual farmers can’t do that.”

Of course, Landcorp’s investments are not philanthropic – the company is required to be as profitable as if it were privately owned. However, Kelly is keen to emphasise Landcorp’s duty to the general industry good. “We’ve gone from being invisible, not commenting at all on industry matters, keeping to ourselves, closed shop – to being much more open. We allow people on our farms, and we benchmark with other groups. We’ve become vocal in industry matters,” he says. “I think our shareholder is warming to the concept that maybe, if as part of its industry-good activities Landcorp can help lift the productivity of agriculture in New Zealand, it’s doing a good job.”

However, as much as Landcorp can set a good example through green policies, science-based improvements and welfare best practice, most New Zealand farmers lack the time or money to follow its lead. In fact, Landcorp’s own decision to phase out sharemilking was another nail in the coffin of a dying farming ideal – the family farm with secure jobs for life. Kelly is philosophical about the change. “Like it or not, sadly, the demise of the family [farm] is just going to continue,” he says. “But what you can do instead of having the [family] farming model is to give employees farming careers, by way of better education, by way of training, by way of super schemes and all those sorts of things. As if they were not on farms, but in other businesses.”

Most Landcorp staff don’t even wish to own farms, Kelly says. “They know if they ever do, they’ll be tiny farms anyway, because of costs. They’ll be less efficient.” Instead, they prefer to invest their salaries off farm, which is typical of New Zealanders’ attitudes to investing nowadays, he says – short term and cash-dividend focused. “Traditionally, farmers have been born poor, they’ve built up assets and they’ve died poor. And they’ve given their kids the farms. Whereas these people, their asset growth is much more liquid, and they can invest in the stock exchange, or whatever.”

Family farmers and smaller corporate farmers are finding it equally difficult to use their farms as financial assets. “Farming’s about intergenerational stuff, high asset gain but low cash returns, and that’s why you’ve been finding that many listed corporate farmers have not done particularly well,” Kelly says. “So what that means is that you’re having overseas investment, which tends to be much more longer term and is going to be more the norm.”

Foreign land ownership is of course a hot topic right now, and Landcorp’s bid in June 2010 for the Crafar farms put it at the centre of the national debate. Landcorp made an offer on the 16 farms after Chinese-owned Natural Dairy’s offer was controversially rejected by

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“Generally speaking, farmers love their farms, they like looking after the environment. There are a few ratbags, I can see that, but that’s the same in any industry.”



Chris Kelly was appointed Chief Executive of Landcorp Farming Ltd - a state-owned enterprise and New Zealand's largest corporate farmer - in March 2001.

Before this appointment, he held various positions with the New Zealand Dairy Board, including Strategic Planning Manager, General Manager for Corporate Planning and Global Head of Strategic Industry Relations. Earlier in his career, he practised as a veterinary surgeon and lecturer. He was a Veterinary Advisor for Glaxo Animal Health Ltd and the General Manager for North East Asia/New Zealand for Pitman Moore Ltd.

Kelly was Chairman of AgVax Developments, a subsidiary of AgResearch, responsible for the commercialisation of animal health products.

He is an accredited director with the Institute of Directors. As well as being on the board of the Bio-Protection Research Centre, he is a director of the New Zealand Agriculture ITO, Landcorp Estates Ltd, Landcorp Holdings Ltd, and Landcorp Pastoral Ltd, and is a member of the Massey University Council. The *New Zealand Listener* magazine named Chris Kelly the 'Most Influential Person in Agriculture' on its '2008 Power List'.

the Overseas Investment Office. “One of the attractions for us was that we felt we would be one of the few purchasers able to purchase the farms outright,” Kelly says. “And that’s still the case. And as time has gone by I suspect the receivers may be rueing the day they didn’t take up our offer even though it was a significantly lesser amount of money at the time.” Landcorp planned to spend some money upgrading the “hastily converted” farms, and on-sell some for a profit while keeping those that proved more strategically important. Having its offer turned down was not a surprise, however, and not too much of a disappointment either. “Oh, we were pretty sanguine about it, we did what I thought was a very full valuation, we believe we [offered] market price for it,” Kelly says. “And you never know, if the second Chinese bid fails, again, and there’s a high chance that’ll happen, they might come back to us.”

While Kelly believes national opinion on foreign land purchases is emotional and smacks of “yellow peril”, he has real concerns about the prospect of increased foreign farm ownership as it affects dairy giant Fonterra. “I think the real strengths of Fonterra are its size and its market power, and if we have organisations competing and chipping away at that market power it’ll just cause Fonterra to be less competitive in the international market, and that’s a concern.”

Kelly has been publicly critical of Fonterra in the past, especially as it was finding its feet after being established in 2001. However, he recognises Fonterra’s huge importance to the country’s economy, and its importance to Landcorp itself as a processor of 60 percent of Landcorp’s milk. “If I see... Fonterra doing wrong, I will bloody tell them. For my benefit, but also for the rest of the industry. And [Fonterra Chairman] Henry van der Heyden knows he has to be very careful with us, because we supply him with all this milk,” Kelly says.

Just as criticism of Fonterra must be balanced with diplomacy, so must Kelly balance concerns about foreign land and asset ownership with acknowledgement of our reliance on export markets. New Zealand’s dairy sector is in a great position to take advantage of Westernising diets in China, Malaysia, Hong Kong and Singapore, Kelly says. He describes how in a typical Asian multigenerational family, the grandmother’s milk consumption is a teaspoon of condensed milk stirred into hot water, the mother’s is a tablespoon of milk powder in hot water, while the kids buy fresh milk. “Generally speaking, the world is increasingly in protein deficit. I know a lot of people are starving, but we’re getting a lot more wealthy people, and as their diets Westernise their appetites get whetted more and more,” he says. “And I think New Zealand’s in a great position.”

Standing in the way of this growth is the ETS, the carbon-capping legislation adopted in 2008 as part of New Zealand’s Kyoto Protocol commitment. Current legislation imposes a carbon tax on any forested land not replanted after felling. When the ETS was adopted, Landcorp was planning to convert 25,000 hectares of central North Island land to dairy and drystock pasture. “When that came into effect it effectively stopped our development, and that land continues to be felled from trees but it’s just lying fallow,” Kelly says. He hopes to convince the Government to allow forestry offsetting when the Kyoto commitment is reassessed in 2012. Offsetting would allow Landcorp to cut down forest for conversion and replant the trees elsewhere in the country, without copping a hefty tax along the way.

While an offsetting solution would keep Landcorp’s development carbon-neutral, its opposition to the ETS has raised the hackles of green campaigners, who are already concerned about dairying’s dirtying of waterways and its



methane output. But dairying is much less harmful than people think, Kelly says, and its economic benefits outweigh any environmental concerns. “At the end of the day it’s all very well to criticise the increase in dairying as doing nasty things, but the economic benefit that farming has brought to this country is huge. People tend to forget that in the whole argument,” he says. “Generally speaking, farmers love their farms, they like looking after the environment. There are a few ratbags, I can see that, but that’s the same in any industry.”

Landcorp sets itself stringent environmental and ethical goals, he says. “One of the things about Landcorp is that we are in the public eye. And we have to not only be seen to be squeaky clean, but actually *be* squeaky clean. So our effluent incursions, for example, are way below the average.”

His worry is that farming’s reputation is putting young people off entering the industry. “When I went through school, and in my life, virtually everyone in New Zealand would have been on a farm. Their father would have had a farm, or their uncle or their cousin, and you’d go and milk the cows on the weekend,” he says. “That’s all changed. And many people, particularly younger, very urban people, think farming’s just a down and dirty terrible problem and New Zealand would get out of it, basically, if they had their way. I think that’s quite a challenge. We have to try to convince our young people that farming is actually none of those things, and, moreover, is very, very important for the economy.”

The legacy and staying power of the measures Kelly has put in place to improve the farming sector’s image, efficiency and environmental impact will soon be put to the test – his time at the company is coming to an end. “I think I’m getting close to my use-by date,” he says. “There’s only a certain amount of value anyone

can add to a business over a period of time, and as your tenure goes your ability to add more value declines. You know, you run out of fresh ideas.” Post Landcorp, Kelly plans to do more work as a board director and to spend more time fishing in the Marlborough Sounds.

Kelly will leave Landcorp in a very different political climate from that which existed in 2001. If National wins a second term in government this November, Landcorp’s privatisation will become a real possibility, but Kelly is untroubled by the thought. “I don’t really care. That’s not my job, that’s a shareholder-owner’s job.” He doubts a sale is on the near horizon, despite the Crown’s need for cash, as Landcorp would be difficult to sell. “We have so many farms that unless they sold them very carefully we’d depress the whole farm market. Secondly, the sheer size of our farms means you’d have to have overseas purchasers and you have the whole issue of Overseas Investment Office again,” he says. “Thirdly and importantly there are still a number of unfulfilled Treaty claims in which Landcorp may or may not play a part and I think you’d find the Māori would just go absolutely ballistic.”

Troubled waters may or may not lie ahead for Landcorp, but Kelly’s focus is firmly on the present, on the daily work his team puts in to constantly improving the way Landcorp operates. He maintains his proudest achievement of the decade was his uniting of Landcorp’s staff into a functional, efficient body. “Now that sounds not a big issue but I can promise you, changing the culture of a company is a huge thing,” he says. “The other things are easier – building dairy sheds and getting more dairy cows, etcetera. But getting inside the people? That’s the real issue.” The company is now starting to bear fruit from its culture shift, Kelly says. “I’d describe it as one big farm with 105 paddocks. So we all get up and go to work to make that one farm a better farm.” ■



Journalist Andrea O’Neil has spent the past eight years treating New Zealand’s universities rather like a taster menu, starting her anthropology degree at Victoria, completing it at Otago and, after a palate-cleansing two years in the UK, returning to Victoria for anthropology honours. Her last course was Massey Wellington’s Postgraduate Diploma in Journalism, in 2010. After five years of study she decided it was seriously time to call for the cheque, and started work as assistant editor at IN-Business Media. She is currently a reporter at Porirua’s *Kapi-Mana News*, and heads to Shanghai in October as a recipient of an Asia New Zealand Foundation/Massey School of Journalism scholarship.

“I’d describe it as one big farm with 105 paddocks. So we all get up and go to work to make that one farm a better farm.”



TANGO

A tour party of Massey MBA students finds business in South America doesn't keep office hours. **Bevan Rapson** talks to MBA student **Brian Davies**.



"A lot of South American business – and Argentinian business, specifically – is nurtured and developed and cemented through eating, drinking and dancing."

Sometimes businesspeople need to just put away their laptops and hit the dance floor.

That's the way it works in South America, at least, as Massey University MBA students Brian Davies, Jason Carnew, Nick Sandifer and David Robinson discovered on a two-week study tour to Chile, Uruguay and Argentina earlier this year.

In a packed schedule of visits to businesses and trade officials, the Massey party of 31 also fitted in tango dancing in Buenos Aires, Argentina – and gained an extra appreciation of how cultural connections can lay the ground for business relationships.

While Massey's MBA study tours to the US and European countries often involve long, demanding days, the South American contingent had to show endurance in the evenings as well, often not sitting down to dinner until around 10pm and not finishing the evening until 1am.

"You can't just go there and be an 8am to 6pm person then hide away in the hotel, because you won't get to do business," says one of the South American tour party, Wellington-based student Brian Davies. "A lot of South American business – and Argentinian business, specifically – is nurtured and developed and cemented through eating, drinking and dancing."

Relationships that begin with a meeting during the day will progress in the evening. "You actually do business and cement relationships around dance halls."

On one level, South America's economies have a lot in common with New Zealand's, with a lot of farming and forestry and a strong focus on rural service infrastructure. Even eco-tourism is a common link. "There are a lot of industries similar to those in New Zealand," says Davies.

But there are also fundamental business-related differences that go well beyond the tango halls, including a greater reliance on cash in South America and the sometimes-related prevalence of corruption. Davies says local businesspeople discussed even the corruption issue quite freely. "They were surprisingly open."

In countries like Argentina, a history of political instability appears to have discouraged businesses from taking a long-term view. Davies: "They are all into short-term planning, short-term maximisation of goals, which is not really conducive to long-term business stability."

Businesses visited during the trip ranged from an eco-tourism horse-trekking venture in the Andes – operating under rather looser safety requirements than would be expected in New Zealand – to



The Massey MBA focuses on how business organisations operate and are managed. It is designed to equip its students, most of whom are managers, with a broad range of skills, enabling them to meet the demands of managing and growing a business or organisation.

The programme is taught by 'pracademics' (academic staff with business experience in their subjects). Class sizes of between 20 and

30 mean individual attention, and part-time study allows the students to accommodate their family and professional working lives.

Study groups meet in Auckland, Palmerston North, Wellington and Christchurch every three or four weekends over the programme's 25-month duration.

The mandatory international study tour is intended to foster understanding of how businesses run in different environments, to

provide an international perspective, and to enhance business relationships both within the group and with overseas contacts.

The Massey MBA is internationally recognised and accredited by the Association to Advance Collegiate Schools of Business International and the Association of MBAs and is backed by almost 40 years of experience in MBA teaching.

For more information, visit <http://mba.massey.ac.nz>.

Chile's state-owned copper mining company, which generates US\$6 billion revenue a year, to a leading lamb and mutton trading company.

Presentations included sessions on Fonterra's South American operations and a PGG Wrightson joint venture. The group was also briefed by New Zealand trade staff and the New Zealand Ambassador to Chile.

It is apparent that widening opportunities in South America go well beyond agribusiness, with energy and technology also seen as highly promising areas for New Zealand individuals and companies.

The MBA students who took the trip are from a variety of fields, including one from the defence forces and another from advertising company Saatchi & Saatchi, along with people in finance, healthcare, manufacturing and project management.

They are in the second year of a 25-month course, during which people study independently but spend 17 weekends in class in the first year and attend six four-day block courses together in the second year. Each class chooses its own study tour destination. A group went to China last year and another recently visited the US, while upcoming tours are going to Germany and Brazil.

While the South America trip perhaps involved more nightlife than tours to other destinations, it

was far from a junket. The team elected to spend one day doing painting and maintenance at a preschool facility in a shanty town on the outskirts of Santiago, Chile. "It was our way of giving something back," says Davies, "for all the learning that we took away."

The rest of the trip was full of presentations and visits to enterprises, each one an opportunity to observe, ask questions and unpick different ways of running companies and doing business.

To reinforce what was learned each day, the team was divided into groups to produce daily presentations on what had been observed. "We had to take learnings out of everything, to turn that around and present our findings." Davies' group took the chance in one presentation to expound on the history and significance of the tango and underline the importance of culture to business. "To be successful in business you need to know where the Argentinians have come from," he says.

So do New Zealand businesspeople have it in them to adapt to the late-night South American business habits? "I think we do," says Davies. "I think the new generation of businesspeople is quite comfortable in that sort of environment." People can take the lead from their hosts, in any case: "The people have a certain vibrancy around them, which is quite infectious". ■



Brian Davies is a management consultant in the finance sector. He took up full-time study in late 2010.



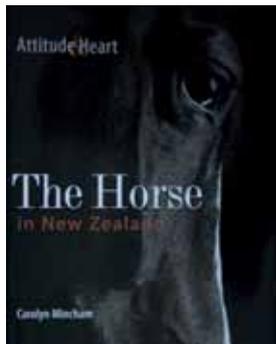
CHRIS CHITTY

Remember *Babe*, the film about the pig who wanted to become a sheepdog? Or *Babe*'s co-star, Maa the sheep? Meet Chris Chitty, the man who created the animatronic sheep stand-in that made Maa a star. Chitty has a longtime reputation for ingenuity. Once he used ballpoint pens to construct an early prototype sampling machine for a professor of endocrinology. In the past few years, through his alter-ego Dr Robotech, as featured in the hugely successful TVNZ show *Let's Get Inventin'*, Chitty has been helping young children prototype new products. As a senior tutor in product development in the School of Engineering and Technology, Chitty lectures and mentors engineering students, teaching them the art of the possible. He is part of the engine of the new New Zealand. To learn more, visit www.engine.ac.nz.



Horse power

The Horse in New Zealand:
Attitude & Heart
 by Carolyn Mincham,
 David Bateman Publishing
 Reviewed by Chris Rogers



When I first sat down to review this book I planned to pace myself to a chapter at a time. However, once I picked it up I found myself so engrossed that I was soon halfway through it. Even now, having read it from cover to cover, I find myself returning to reread some of the small sections and personal accounts of working with horses in early New Zealand.

The Horse in New Zealand progresses from the horse's more utilitarian past to its current status as a leisure and recreation animal, along the way revealing the nature of the social and economic contributions it has made to New Zealand.

I was fascinated by the social status attached to some forms of horse ownership. Take the Hon. Petre, who, in the 19th century, "having first established himself in the colony, returned to England to acquire the essentials needed to set himself up in Wellington as a gentleman of wealth and standing. Along with a wife, servants and household goods, Petre arrived back in the colony with a cargo of mares and two thoroughbred stallions".

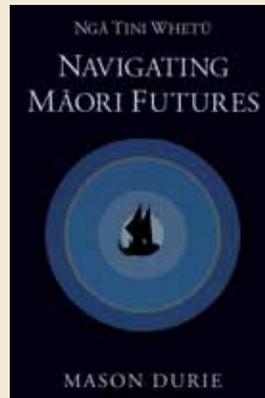
That the book is impeccably researched is hardly to be wondered at: its origins lie in a doctoral thesis. Mincham graduated with a PhD in history from Massey in 2008.

Even for those who are not particularly 'horsey', this is a book full of rewards and a valuable addition to the library of anyone interested in the development of New Zealand.



Getting there from here

Ngā Tini Whetū: Navigating Māori Futures
 by Mason Durie, Huia Publishers
 Reviewed by Lana Simmons-Donaldson



This is a book about how current choices determine future destinations. It brings together 25 papers written and presented by Professor Mason Durie between 2004 and 2010, a number of them previously unpublished. They are ordered into four sections: indigenous development, Māori development, health and the Paerangi lectures.

The section on health includes a presentation on global mental health promotion that Durie delivered last year in Washington DC, and another on indigenous resilience to disease delivered in Rotorua in 2006.

The Paerangi lectures explore scenarios – good, bad and somewhere in between – for the future of the Māori estate, health and the Treaty of Waitangi.

Ngā Tini Whetū explores the complexities of balancing te ao Māori (Māori perspectives) with Western knowledge. Māori, Durie writes, must seek to succeed in contemporary society, while at the same time continuing to live as Māori.

Not all of Durie's views are at one with current-day practice. Durie puts a strong argument for race- and ethnicity-based policies. His focus is on achieving the best outcomes for his people.

Apparent throughout is Durie's fluent command of a vast body of knowledge. Less apparent perhaps – for he tends to write as though a neutral observer – is that Durie has played a significant role in catalysing the transformations about which he writes.

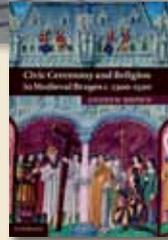
Durie writes of the pioneering late Professor John Cawte Beaglehole that his work will "in time, provide further fertile ground for a distinctive New Zealand historiography". The same can be said of Durie's labours. *Ngā Tini Whetū* will help frame discussions around the future of Māoridom for years to come.

Beginning with *Tē Mana, Tē Kāwanantanga: The Politics of Māori Self-Determination* (Oxford, 1998), Durie has now written five books while at Massey. He is currently the university's Deputy Vice-Chancellor and Assistant Vice-Chancellor (Māori and Pasifika).



Photo by Cavalier JY, commons.wikimedia.org.

In Bruges



According to history lecturer **Andrew Brown**, the author of *Civic Ceremony and Religion in Medieval Bruges c. 1300–1520*, **Bruges really is 'like a fairytale'**. He talks to **Malcolm Wood**.

What was it that sparked your interest in the late medieval period and particularly in the influence of religion in society?

Many things! But perhaps most significant was reading (for the first time, in 1984) Johan Huizinga's book *The Autumn of the Middle Ages*. It's a brilliant book. It was written in 1919 – it's certainly flawed, but there's no book since that has tried to link culture, religion, politics and society in such an evocative way.

And Bruges? What was it that took you there?

Not the Trappist beer and Neuhaus chocolates, of course. I first visited Bruges in 1989, I think; and it is a wonderful city, if a little full of tourists. But in the 14th century it was full of merchants from all over Europe – creating an international market for goods and banking. It's been called the 'cradle of capitalism', and great wealth meant investment in consumer goods – as well as spiritual goods: churches, processions and so on. And there's a wealth of unexplored sources to be found in the city's many archives. A great place for historians!

Actually Huizinga went to Bruges in 1902 and was dazzled by an exhibition he saw there of late medieval Flemish paintings. He wrote later that this experience made him want to become a medieval historian, and "to conjure up living pictures in the theatre of the mind".

I was bewildered by the vast array of saints and saintly relics that feature in your book. What was it with this medieval obsession?

It may well seem an 'obsession' in modern societies. Relics were invested with a power that is hard to comprehend today. Remains of saints were sites of power, direct physical links on Earth with saints in Heaven – being close to them allowed you access to their patronage and intercession, and for many reasons. Even sophisticated, capitalist – entirely rational – merchants of Bruges saw the need for saintly help.

These seem to have been times when some saintly intercession would have been useful. What was there most to fear if you were a citizen of late medieval Bruges?

There were huge upheavals in this period: the Black Death and other plagues; crises in the church; conflict with the town's rulers (the counts of Flanders); and for the wealthy citizen the threat of popular uprisings was never far away.

Andrew Brown is the author of *Popular Piety in Late Medieval England: the Diocese of Salisbury, c. 1250-1550* and of *Church and Society in England, 1000-1500*. *Civic Ceremony and Religion in Medieval Bruges c. 1300–1520* is published by Cambridge University Press.

And one way of finding favour with a saint was to mount a procession, of which there seem to have been a great many. What other uses did processions have?

The civic authorities did begin to make much use of processions that carried relics – to ask for saintly intercession in times of crisis, and sometimes deliberately to re-establish their authority within the town. The call for a procession was sometimes literally a call for order.

I was surprised by just how well ordered and regulated – maybe even coercive – Bruges seems to have been and by the way in which it provided for such things as the welfare of widows, orphans and even prisoners.

The town council did have coercive power. Welfare for the poor did exist. But a strong sense existed of there being a 'respectable' and 'unrespectable' poor. There was a flipside even to the charity provided by the numerous almshouses: only a certain kind of poor person was admitted.

I was also surprised at the array of guilds represented in Bruges and the way in which some – the jousting and crossbowmen – seem to have been the Rotary Clubs of their day. What function did the guilds perform?

The White Bear jousting group and the St George crossbow guild were very much like Rotary Clubs – but even more socially exclusive. Besides religious functions, like providing intercession for their members, these guilds were a way of acquiring social prestige.

To what degree do you think we in the present day can ever hope imaginatively to understand the workings of a highly religious late medieval society?

Ultimately perhaps we never can. But it's worth the effort: it gets you thinking about and questioning the priorities of our own society.

Finally, although the movie *In Bruges* has some fun with the place's attractions, I take it you are a fan. What's on your must-do list?

It's a great film! Bruges is a 'fairy tale', and you're usually safe from assassins. Visiting the Holy Blood relic is a must (and be there on Ascension Day when the Holy Blood procession still takes place). Seeing St John's Hospital with the Memling paintings. Trying a glass of Hoegaarden witbier – grand cru. ■

Parcel post

Your Books are in the Mail: Fifty Years of Distance Library Service at Massey University

by Bruce White, Palmerston North, Massey University Library

Reviewed by Craig Cherrie

Distance education has been a distinctive element of Massey University since the 1960s – the element that gives substance to its claim to be a truly national institution. The origins and development of this story were conveyed by Tom Prebble’s recently published 50th Jubilee history. Bruce White’s short history weaves more threads into the fabric of reflections provoked by the Jubilee, capturing the role of the University Library in the development of this ‘national’ service. The library, he argues, has been “the (frequently unacknowledged) third leg of the distance education stool”, the other two being teaching and learning.

Largely drawn from documentation of the Distance Library service, it carries more than a whiff of an insider’s perspective and is all the better for this. It is not, as the author notes, a “personal memoir”, but his presence in the history as someone who was there or thereabouts through a substantial period of the development furnishes insights and anecdotes that a more independent commentator could not draw on. The necessary record of developments is leavened by the writer’s assessments and asides on personalities, internal politics and the ebbs and flows of bureaucratic support and neglect.

As with many institutional histories, it is an account of a struggle for resources in the context of respective limited and expansive visions of the library’s perceived role in distance service provision. It conveys well the library’s efforts to improve the lot of the distance student, persistently lobbying for an equivalence of service with internal students. These efforts have seen the distance service rise from a 1960s’ one-woman operation of scant resources – a simple provider of requested books – through to its compound ‘new century’ roles of delivering not only a full range of academic sources but also evidently educative interventions in developing student skills in the discovery

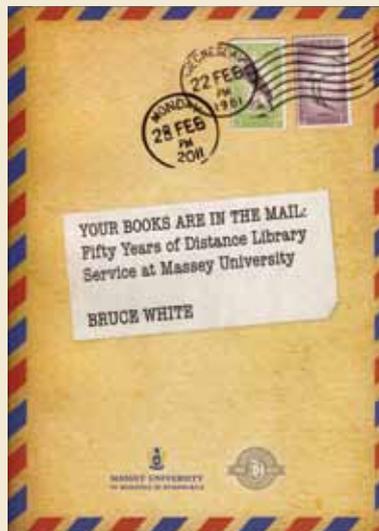
and use of information resources. At its core is a story of sustained dedication by a succession of staff, often unrecognised except by those who they directly serve – the service continues to garner more thanks from students than any other section of the library.

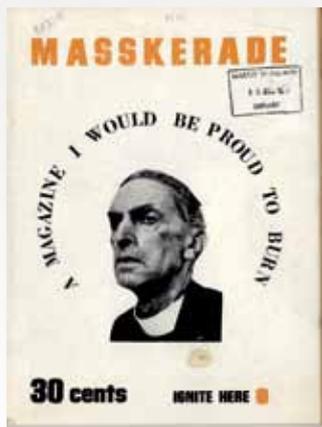
At a broader level it is a useful examination of what constitutes a distance library service. One of several thematic threads running through the account is “an attempt to answer the question of [what is a library and] to continue to find new responses”. These notions are not static of course, so never quite fulfilled. ‘Service’ is a slippery concept that has continued to evolve in concert with educational, technological and political innovations and ideologies. Another persistent thread is this tension

between the expectations of service pricked by the educational and technological drivers and the library’s resourcefulness in rising to meet these.

The writer conveys well the influences of larger forces on the national stage. The service evolves from the creatively making do with little through the early years in a context of narrower distance education visions, to the maturing of services in the 1980s and the seeking of national solutions to the ‘loneliness of the long distance student’ before such “communitarian approaches” were hobbled by Rogernomic ideals of institutional competitiveness. The introduction of fax delivery in the 1990s, and then the seizing of

significant opportunities offered by the implementation of digital tools in this century, brings the story to the present, but not to an end. The affordances of rapid technological advances are still of course revealing themselves and, given where tertiary institutions and their libraries are heading, new accounts will be required. *Your Books are in the Mail* celebrates 50 years of service and adds another useful layer to the history of the complex assembly of communities that comprise a modern university. ■





In the view of the Tribunal the dominant impression conveyed by *Masskerade* 69 is one of barely relieved vulgarity. In word and picture its content is coarse in conception and crude in expression. Its frequent resort to the subject of sex as a prop for its humour, the tasteless attacks on religious forms and attitudes, and a series of jokes involving disease, bestiality and racial prejudice undoubtedly offends against the normal standards of propriety and good taste.

The Indecent Publications Tribunal's view of an earlier, more notorious issue of *Masskerade*.

B A g H u m

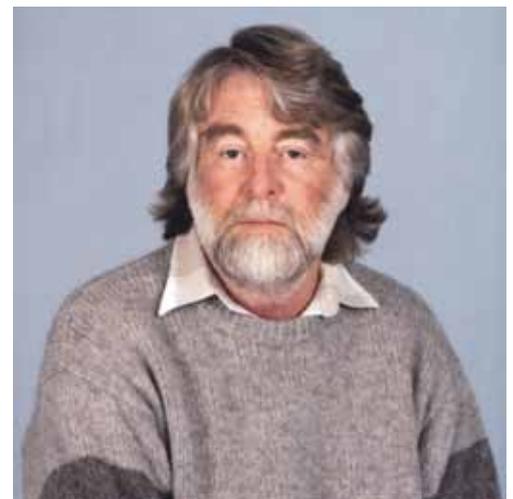
william broughton's ideas about multidisciplinary study were plainly ahead of his time. he talks to john muirhead, currently head of the school of english and media studies, about a modest proposal he made back in 1971 in the pages of the capping magazine *masskerade* for a course called *literate agriculture III*.

Literate Agriculture III was indeed my work. Tom Scott approached me in a general way: "Have you got something in your bottom drawer that would be sure to bring Massey into disrepute, annoy the Vice-Chancellor and upset the Prime Minister (one Robert Muldoon)? I need it within a week". I was faced with the hard choice of marking another extramural essay or writing something whimsical for *Masskerade*. I got to work, ignoring the letters from indignant students requiring me to apologise for my dilatory ways.

The *Masskerade* piece appeared in the *Listener*, without my prior consent, about six years later. On a Monday or a Tuesday I picked up my copy of the *Listener* at the local dairy, as was my custom, and took it to my room at Massey where I did what I normally did: turned to Tom Scott's column first of all, an experience shared with the entire literate population of New Zealand at the time. Tom was the most bankable writer in New Zealand, and I don't think anyone's matched him since. Hello, I thought, I've read this before, and I realised I knew precisely where it had come from. At the end of the column, Tom acknowledged Dr William Broughton, Lecturer in English at Massey University.

I thought there's nothing I can do about this before morning tea. I had a vacation course on then, on Shakespeare or New Zealand literature. After morning tea I went into the lecture room

and said to the assembled multitude, if you want to know what's in the examination for this year, you'll find it printed in today's *Listener*. I paused; there was a deathly silence in the room. I didn't want to think about what I'd just said. Right, I said, let's just pick up from what we were talking about yesterday, about the writer John Mulgan...



Now retired, Dr William Broughton was an academic staff member in the Department of English (later the School of English and Media Studies) from 1963 to 2004, specialising in the literature of New Zealand. From this year the School will offer annually the William Broughton Bursary in New Zealand Literary Studies.

The recent strident call by Hon. Piggy Muldoomsday for greater economies within the New Zealand Universities has not gone unheeded. So much could be done at Massey by combining staff and students from the impractical, ivory-tower, head-in-the-clouds departments like, say, English with those from the useful, community-serving, forward-looking sciences like Animal Health, Farm Management, Dairy Husbandry, Agricultural Economics, Soil Sciences, Poultry Research, and so on. The result, we have no doubt, would be a truly educated rustic, one of nature's gentlemen (or as many of them as the Hon. Minister can get on the cheap) a graduate who combines the knowledge gleaned (agricultural metaphor!) from both Humanities and Bestialities; a graduate whom (if we may mix metaphors from the disciplines of Food Technology and Soil Science) we might describe as "the Salt of the Earth".

Such a man, we think, graduate as B. Ag. Hum. (Massey) after passing a final degree paper such as the following:—

LITERATE AGRICULTURE III

Time allowed: Three hours. Answer any FIVE (5) questions

1. "The lowing herd winds slowly o'er the lea".

Outline, with reasons, your design for an appropriate herring-bone shed to accommodate this situation.

- (2) "Yet I do fear thy nature.
It is too full o' the milk of human kindness".

EITHER: Discuss the effects of excessive anthropomorphoid trace elements in the general lactation patterns of 9th Century Scotland
OR: Would this problem have been solved by a different pasturing or afforestation programme in the region; say, moving Burnham Wood to Dunsinane?

- (3) "When Zephyrus eek with his swete breeth
Inspired hath in every holt and heeth
The tendre croppes . . ."

Would you prefer macrocarpa or pinus insignis as a shelter-belt against the prevailing westerlies during the first stages of crop germination?

- (4) "Once my strength was an avalanche —
Now it follows the fold of the hill —
And my love was a flowering branch —
Now withered and still."

How would you combat the erosion and blight problems described here?

- (5) "There is a willow grows askant the brook".

Do you consider the willow to be the friend or foe of the water conservationist?

- (6) "Hail to thee, blithe spirit;
Bird thou never wert."

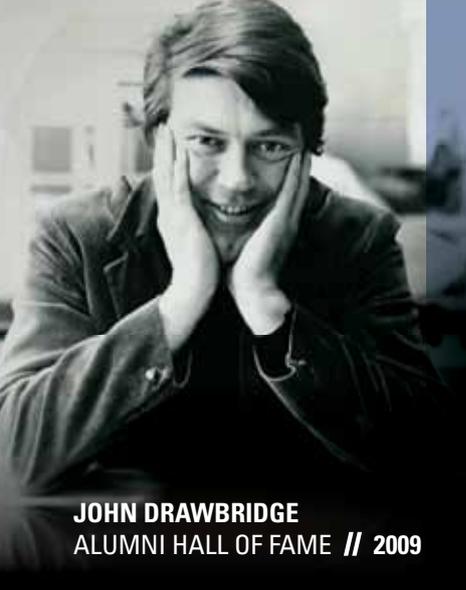
Assess from the internal evidence of this statement whether the bird referred to was not a Black Orphington or not a White Leghor..

- (7) "Sometime too hot the eye of Heaven shines,
And often is his gold complexion dimm'd."

Design a glasshouse to combat the climatic fluctuations described in this statement. (Drawing paper may be obtained from the examination supervisor).

- (8) "... we therefore commit his body to the ground, earth to earth, ashes to ashes, dust to dust . . ."

Does this seem to you the most efficient way of dealing with stock carcasses after culling? What benefits would be gained by the installation of a farm incinerator of adequate capacity?



JOHN DRAWBRIDGE
ALUMNI HALL OF FAME // 2009



LUCY McINTOSH
FASHION DESIGN // 2010

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(part of the REAL New Zealand Festival and with funding assistance from the New Zealand Lottery Grants Board).



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For more information visit:
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For further information about these events see:
creative.massey.ac.nz

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Wellington Technical College: 1905 – 1961, Wellington Polytechnic School of Design: 1962 – 1998 or Massey College of Creative Arts: 1999 – today.



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