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News from Massey University | Issue 21 | **April 2012**

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STORYBOOK BEGINNINGS

fighting the summer reading slump

12 secrets of cult leaders
How to win followers and influence people

MASSEY UNIVERSITY
TE KUNENGA KI PŪREHUROA
UNIVERSITY OF NEW ZEALAND

THE ENGINE OF THE NEW NEW ZEALAND

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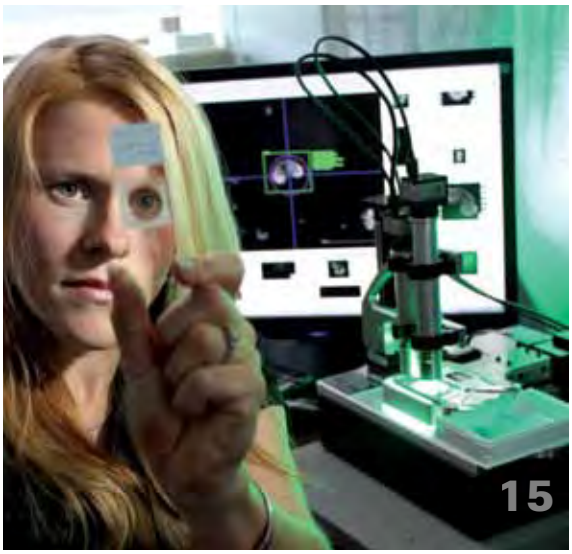

COVER STORY

VIEWPOINT

PROFILES

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FEATURES

DEPARTMENTS

FIRST WORD

Vice-Chancellor Steve Maharey writes.

During this past summer, Nicholson has been distributing free books at regular intervals to children between the ages of seven and a half and eight and a half in the sorts of household where books are not part of the usual furniture.

Some of you may blame Bilbo Baggins. Some of you will inculpate The Famous Five. Or perhaps, if you are of a more recent generation, it will have been Harry Potter or some teen vampire. The culprits are varied. Myself, I blame the likes of Dr Dolittle, Tintin and Asterix. In the warm haven that was the Palmerston North library, close by my family home, they and their kind got me hooked on reading.

Thank goodness they did. From childhood, when every week I ploughed my way through five or six books, and on into my adult life, reading fed my imagination, enlarged my understanding of the world and helped form my character and thinking. In my several professional lives, as an academic, politician and now Vice-Chancellor, a constant job requirement has been the ability to assimilate and analyse large volumes of text and to set down my own thoughts in a clear, reasoned fashion. And it all began with Dr Dolittle.

Of course, the media through which I learned to read – the kind sometimes now referred to as dead tree – no longer has the field to itself. iPads, Nooks, Kindles, tablets – the *i*-this and the *e*-that – are proliferating. Will the traditional dead-tree media vanish? I doubt it. The always-off, distraction-free, abuse-tolerant, no-batteries-required text delivery mechanism that is a book, magazine or newspaper has its own advantages. Paper and pixels, both have their place.

Yet, even if print on paper were to go the way of music on vinyl, the primacy of the written word is not going to disappear.

One study, which looked at the overall pattern of information consumption in the United States, found that while the proportion of information people gained from conventional print media had fallen from 26 percent in 1960 to 9 percent in 2008, this was more than made up for by the amount of text-based information they had taken in on their computer screens. If words were the unit of measurement, reading as a percentage of information consumption had actually increased.

So whatever future awaits us, it is important that our children learn to become proficient readers.

It has been said that children are made readers on the laps of their parents. Probably many of you will have treasured memories of the stories read to you at bedtime, a ritual you now follow with your own children. There will have been books as birthday and Christmas presents. Books you could scrounge from your parents' shelves. Magazines and newspapers scattered about the living room.

If so, you should count yourself privileged. Many New Zealanders grow up in largely print-free households, sometimes with parents who are not native English speakers. For these individuals, their best and only hope of being inducted into the skills of reading lies in New Zealand's education system.

How can we help? Professor Tom Nicholson, one of Massey's experts on literacy, has some ideas. During this past summer, Nicholson has been distributing free books at regular intervals to children between the ages of seven and a half and eight and a half in the sorts of household where books are not part of the usual furniture. The books are meant to counter the 'summer slump': the period away from school when reading proficiency normally regresses. The enterprise has been enabled by the extraordinary generosity of a private donor.

The preliminary results show that, sure enough, if you give children books that they have chosen and that match their reading levels and ask their parents to read with them, they will maintain their reading skills.

Here is an educational intervention that, if more widely adopted, will materially improve the lives of New Zealanders. It is an affordable, evidence-driven and non-ideological educational intervention – and as such it is somewhat unusual.

Perhaps more than any other public good, educational policy is prone to the fads and fancies of the day. Headlines and letters to the paper perpetually proclaim that education is in crisis or decline. In response, we look to United Kingdom or United States models: to charter schools, or standardised testing, or payment by performance. Often these are mechanistic systems, taking the focus away from where it ought to lie, on meeting the needs of the individual learner.

In any case, by some literacy measures the New Zealand education system actually performs well. As the Ministry of Education puts it, our best readers are among the best in the world. The trouble is that our system also produces a so-called long tail, which encompasses lower levels of achievement and is disproportionately made up of Māori and Pasifika students. This is the talent and potential we are squandering.

So where should we look? There is a model out there, but it may not be where you think, and it is one that does not subscribe to private schools, standardised testing or rankings.

It is Finland, a small, isolated nation with a population not that much bigger than our own, which consistently sits near the top of the educational rankings.

The secret of its success? Finland selects its future teachers from the top 10 percent of graduates and requires them to gain Masters in Education. (Massey is following a similar path in proposing that initial teacher education be focused on the graduate and postgraduate levels.)

To be a teacher in Finland is to be accorded a similar status to – if not quite the same pay rate as – that of a doctor or lawyer.

The result: teachers who are knowledgeable and committed, who will pull out all the stops to make sure every child fulfils his or her potential.

Should we expect anything less? As T S Eliot is said to have remarked, the great ages did not contain more talent. They wasted less. ■

In memoriam

"The gyrations of the nucleus are extremely beautiful and it is through their subtle variations that we can learn so much. The real art is to coax the nucleus into a state where it becomes exquisitely sensitive to the molecular property we are trying to understand. That is what NMR [Nuclear Magnetic Resonance] magic is all about."
Professor Sir Paul Terence Callaghan, scientist, 2011 New Zealander of the Year, 1947-2012

Sir Paul Callaghan began work at Massey in 1975 as a lecturer in the fledgling Department of Chemistry, Biochemistry and Biophysics after returning from Britain, where he had completed a PhD in low-temperature physics at Oxford. Soon after his arrival, the department purchased an FX-60 Nuclear Magnetic Resonance (NMR) spectrometer, "a piece of equipment about the size of a decent sideboard", as one of his then colleagues Ken Jolley remembers. Its purpose was purely practical: to identify the products of chemical reactions. Sir Paul, however, had other plans.

He set about adapting the spectrometer to let him study molecular motions, adding custom-built attachments. It was a career-defining moment. During the next 25 years, Sir Paul made the territory of NMR and Magnetic Resonance Imaging (MRI) his own.

In 2001, Sir Paul left Massey to become Director of the Alan MacDiarmid Institute of Advanced Materials and Nanotechnology based at Victoria University of Wellington.

Three years later, Sir Paul became one of the founders of Magritek, a business established to commercialise the research conducted at Massey and Victoria. A number of Massey alumni became Magritek staff, including Robin Dykstra and Magritek's current CEO Dr Andrew Coy. "MRI & NMR for everyone, everywhere" is Magritek's motto, and it has been highly successful in selling a range of high-tech specialist equipment worldwide. It is a curious domain for New Zealand to assert dominance, but then, as Sir Paul would say, what New Zealand turns out to be good at is really weird stuff.

The Magritek model – achieving a return on high-value intellectual capital rather than relatively low GDP-per-capita activities such as tourism – was one that New Zealand should actively pursue, thought Sir Paul. At presentations around the country, through his book *Wool to Weta*, and by making himself constantly available – even in the last days of terminal cancer – he put forward his vision for how New Zealand can become the highly educated, prosperous, clean and green, inclusive nation it aspires to be.

"Our top technology companies export $4 billion a year," he would tell audiences. "We need 10 times that, a goal we are capable of achieving. And to ensure all New Zealanders share in the benefits, every child must have a chance at taking part in this future."

At right: Paul Callaghan at work in 1977.

Talking Points

But wait a minute, in a delightful irony, here in 100%-pure New Zealand we harvest, export and sell locally at least four endangered freshwater fish species.

Four of the five species in your whitebait fritter are listed as endangered, but you can buy them at any supermarket. And our amazing, endemic longfin eel is harvested and exported but is one of our threatened species. Sadly our Ministry of Fisheries is 'managing' them to extinction by allowing them to be harvested countrywide under the much lauded 'quota management system' that even they admit is failing longfin eels.

Then to add insult to injury most of these threatened eels are exported to countries where they are much coveted because they have driven their own eels to the verge of extinction.

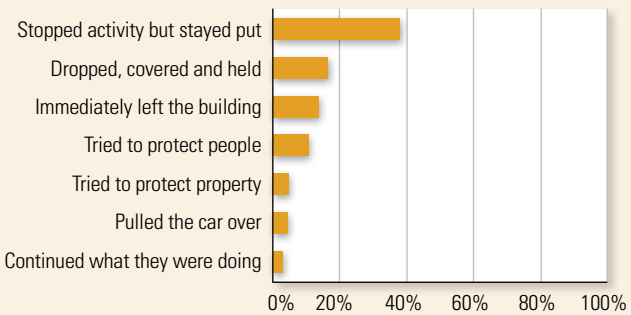
Whitebait | Status: four out of five species endangered | Price per kg : $80 (frozen mail order)

Longfin eel | Status: endangered | Price per kg : $19 (seen in Auckland fish market)

North Island brown kiwi | Status: endangered | Price per kg: Priceless (fully protected)

Dr Mike Joy, Director of the Centre for Freshwater Ecosystem Management and Modelling, blogs about the values we assign different native species. http://definingnz.com/category/viewpoints/mike-joy/

What people did



From *Immediate Behavioural Response to* [September 2010] *Earthquake in Christchurch New Zealand*, Michael K Lindell, Carla S Prater and Shih-Kai Huang: Texas A&M University Hazard Reduction & Recovery Center | David Johnston and Julia Becker: GNS Science/Massey University Joint Centre for Disaster Research

What experts advise

1. "I've been internalising a really complicated situation in my head." *Actor Darcey-Ray Flavell in the New Zealand Transport Agency (NZTA) drink-driving ad in which a young man ponders the arguments for and against telling his friend not to drive.*
2. "You know I can't grab your ghost chips!" *Actor Darcey-Ray Flavell in the NZTA drink-driving ad in which a young man imagines his friend dying in a car crash and returning as a ghost who offers him chips.*
3. "Government is not there to make your life a better place necessarily." *National MP David Bennett.*
4. "To have a cell phone, a dog and a ute." *Building and Construction Minister Maurice Williamson, on all a person needs to claim to be a builder.*

The four most memorable New Zealand quotes of 2011 as voted for in a competition organised by communication lecturer Dr Heather Kavan, of the School of Communication, Journalism and Marketing.

The Eves of Madagascar

New research from a Massey University computational biologist has found that 30 Indonesian women first settled the island of Madagascar. The finding sheds further light on an oddity in how the world's landmasses were first settled. At its closest point, Madagascar is just 400 kilometres distant from Africa; the Malay Archipelago – modern Indonesia – is more than 6000 kilometres away.

Dr Murray Cox, of the Institute of Molecular Biosciences, led a team that screened the DNA of Madagascans and Indonesians to reconstruct the island's early history.

"It has been known for a very long time that there is a really clear Asian signature in the DNA of Madagascans," Cox says. "What we've done is developed a computer model to find out more about that very early settlement history. Our research suggests that around 30 Indonesian women came to the island about 1200 years ago, around the 9th century AD."

Almost all Madagascans today are related to those 30 founding women. "There has been trading along the Indian Ocean for millennia, and people have assumed that Indonesians settled there as a result of lots of people using this trading route," he says. "But if it is only 30 individuals, that theory doesn't make sense. So it appears more likely that this was an accidental event – it certainly wasn't a big, planned movement of people."

Cox and his team took DNA from 300 Madagascans and almost 3000 Indonesians and used a computer model to simulate evolution under various parameters. A year and a half of computer time was needed to run the simulations.

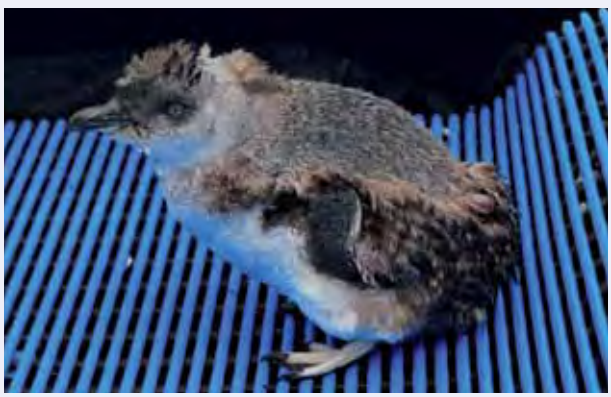
Dr Cox says simulations are needed to discover the details of the settlement. "Just looking at the DNA itself will tell you some things, like the fact there is an Asian connection," he says. "But what it won't tell you is how many people came and when that happened and what the population size is today. To get that you have to run simulations to figure out what has happened in the past.

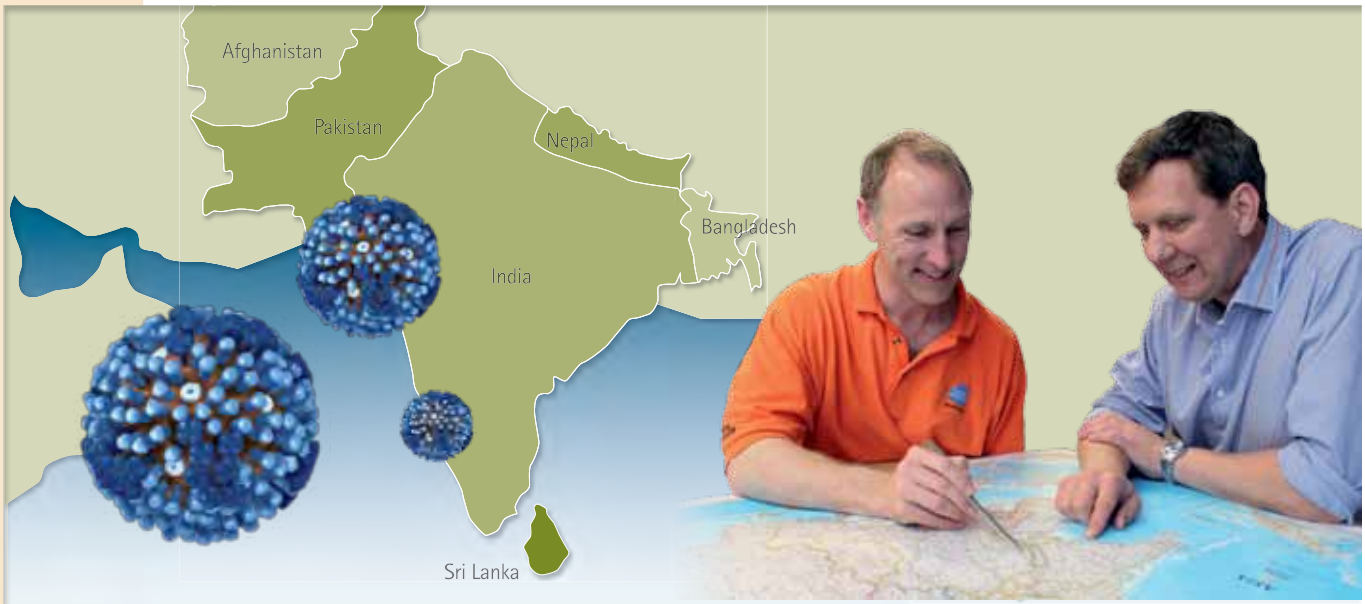
"We simulated under a whole range of demographic models and found one that matched the actual outcome. That gives us a measurement of what the most likely settlement model is."

Cox worked with a team that included researchers from the Eijkman Institute in Indonesia, the University of Arizona and the University of Toulouse. The research, published in the *Proceedings of the Royal Society,* was funded by the Royal Society of New Zealand through a Rutherford Fellowship.

The cover illustration for this issue of *definingnz* is by Denise Durkin, a full-time, Wellington-based designer, artist and illustrator. Durkin graduated from the Wellington School of Design in the early 1990s, making her a near contemporary of another School of Design graduate, the magazine's designer, Grant Bunyan. More about Durkin can be found at www.illustrationwish.co.nz.

When the December 2011 issue of *definingnz* went to press, the National Oiled Wildlife Response Team encampment on Tauranga's foreshore was still tending to hundreds of birds, but a series of releases had begun. By late January the Tauranga facility had been decommissioned, and just 25 little blue penguins and two grey-faced petrels remained in the care of the wildlife facility on Massey's Manawatū campus. These were birds that either still needed to regain their waterproofing after having been washed, or, like the penguin below, were undergoing moult.





World Bank funds health project into second phase

The World Bank has granted Massey $5 million to extend its education programme strengthening Asian public health and veterinary capacity to combat zoonotic diseases.

In the first phase of the programme, 67 health professionals from India, Pakistan, Sri Lanka, Bangladesh, Afghanistan and Nepal were trained in One Health epidemiology concepts as part of two Massey qualifications specifically developed for the programme – a Master of Veterinary Medicine (Biosecurity) and a Master of Public Health (Biosecurity).

Now, Massey staff working with colleagues from other leading international universities will enable that learning to be put into practice, through the development of One Health Hubs and collaborative disease investigation projects.

These activities will assist the former students and their health professional colleagues in the South Asia region to combat real-world problems relating to zoonotic diseases such as avian influenza, rabies, brucellosis and anthrax.

Project Director Dr Eric Neumann says the second phase builds on the Master's degree training and provides the graduates with a chance to "operationalise the concepts they've learned through their formal Massey training and to extend their expertise to others in the region".

The phase two activities will involve the creation of an organisational structure embedded in the South Asia region, the development of a collaborative online work environment, and the implementation of disease investigation projects that are focused on the critical health needs identified in each country, he says.

One Health Hub project manager Dr Peter Jolly says the One Health Hubs are a key vehicle for applying the training completed to date. "We now have trained specialists in each country who will lead projects focused on important zoonotic diseases in their country," he says. "Through building intellectual capacity in the region, endemic and emerging zoonotic diseases such as avian influenza can be controlled using an integrated approach that involves both veterinary and public health specialists."

An online meeting point – HubNet – is being devised to provide both the forum and the resources needed to carry out these projects.

"HubNet gives participants an operational framework," Jolly says. "The online forum will provide them with the space to interact and also give them access to an e-library, disease database, communications and reporting tools, and a learning management system."

Once hub members begin work on a project they can efficiently identify sampling or experimental work that needs to be carried out and be mentored through to its completion. "We want these projects to influence policy and have a real impact," Jolly says.

The phase two funding covers One Health Hub activities through to the end of 2013. By this time, Neumann anticipates the hub participants will have the experience necessary to maintain the collaborative environment provided by HubNet with much less reliance on Massey University. "The idea is to create enough value in the HubNet environment that the early participants are motivated to adopt it as their own."

The World Bank manages funding for the Masterate training and development of One Health Hubs on behalf of the Avian and Human Influenza Facility, a multi-donor trust fund financed mostly by the European Union that supports influenza-related programmes in various countries.

www.onehealth.org.nz

Safeguarding a taonga

In 2010 the Waitangi Tribunal described te reo Māori as approaching crisis point. Older speakers were passing away and the proportion of Māori children participating in Māori-medium education had fallen from 18.6 percent in 1999 to 15.2 per cent in 2009.

Can crisis be averted? Here is a reason to be hopeful. This year 27 very special first-year students were welcomed onto the Te Kupenga o te Mātauranga Marae at the Manawatū campus.

For four years the students will live and breathe te reo Māori as part of Te Aho Tātairangi, New Zealand's only four-year, degree-level te reo Māori immersion teaching course.

The course will be taught by distance learning interspersed with regular campus-based block courses. Throughout the course, all of the papers, exams and assignments will be in te reo Māori; during the block courses it will be the medium of studying and socialising.

Back in their home regions, each student is assigned to a kura hāpai – a mentoring school – to ground their understanding in the real world of children and classrooms.

The course will lead to either a Bachelor of Teaching Māori Medium or a Diploma Māori Education.

Partnering with Massey in delivering the course is Te Rūnanga Nui o Nga Kura Kaupapa Māori – the organisation behind the development of Kura Kaupapa Māori (Māori-language immersion schools).

Massey University Associate Professor Huia Tomlins Jahnke (pictured), who is leading the development of the course, wants to see 200 course graduates working as teachers by 2020.

King and country

Almost a century has passed since the guns of August 1914 announced the beginning of World War I, and over the years there have been many histories. Nonetheless, much still remains to be said, according to Professor Glyn Harper.

"The full story [of New Zealanders in World War I] has never been told, and there is a risk that if we do not capture the narratives now, they may never be heard."

As the leader of the the 'Centenary History of New Zealand and the First World War' project, Harper is now to have his part in providing a remedy. Launched in December 2010, the project is a collaboration between Massey, the New Zealand Defence Force (NZDF) and the Royal New Zealand Returned and Services' Association.

Chief of Defence Force Lieutenant General Rhys Jones and Dylan Judson, great-grandson of Sergeant Reginald Stanley Judson VC, DCM, MM.

During the project, nine works of history are to be published, each covering a different aspect of the war. The first, *The New Zealand Soldier at War 1914-1918* written by Harper himself, is expected to be ready for Anzac Day 2015. The second, by NZDF historian John Crawford, will take the New Zealand Expeditionary Force as its subject.

"This will be the most complete account yet of New Zealand's involvement in the First World War. It will be the first history to fully cover the role of the navy and the air force in the conflict. We believe it will become the reference text for the next 10 years, but it will also be accessible so that it has appeal to families whose forefathers fought in the war," says Harper.

"There is a groundswell of interest in the part New Zealanders played in the First World War. There is a natural curiosity for several reasons: the time is right, there is a lack of understanding because we don't teach it in schools, and military history is our family history. For a small nation we made a huge contribution," says Harper.

New Zealand, which had a population of a little over one million at the time, deployed more than 102,000 soldiers, sailors and airmen to support Allied troops overseas. Just on 60,000 became casualties, with some 18,000 being killed.

Massey and the NZDF are funding the first two histories, and Harper hopes that the growing interest in our military history and in an event that helped shape New Zealand will encourage the public to contribute to the funding of further volumes.

Grand designs

Changes are afoot on Massey's main Turitea campus in Palmerston North. One is the imminent arrival of the College of Education, which is shifting several kilometres from the Hokowhitu site it has occupied since 1960. A second will be the turning of the sod on the grounds overlooking the oval for the multi-storey building that will be the college's eventual home. A third is the seismic strengthening and restoration of the nearby buildings, the venerable and much-loved Sir Geoffrey Peren (formerly Main) Building and Refectory, which is currently home to staff from the humanities, social science and business.

During the building work, two temporary villages will house the staff and functions that have been displaced.

The Refectory is scheduled to be reoccupied in mid-2014 and the Sir Geoffrey Peren Building by the beginning of 2015.

All up, the project, which will also include several other upgrades and alterations to existing buildings, is budgeted at $57 million in its five-year span.

Elsewhere on Massey's campuses, builders have also been hard at work. On the Albany campus a $15 million student amenities centre housing student services, dining, shopping, clubs and social activity opened in March, while on the Wellington campus a $20 million building for the College of Creative Arts, which among other things will cater to growing numbers of international postgraduate students, is scheduled to open in June.

The Turitea campus's Main Building and the Refectory were designed in the 1920s by the then New Zealand-based American architect Roy Lippincott, New Zealand's only direct link to the celebrated Chicago School architects Frank Lloyd Wright and Walter Burley Griffin.

The Sir Geoffrey Peren Building, constructed in 1929–31, was the original base of the Massey Agricultural College, and housed science laboratories, lecture theatres, library and office space for staff. In 2010 it was renamed after Massey's first principal. Under a conservation plan developed in 2009 it will be restored largely to its original condition as well as earthquake strengthened.

The Refectory, built at the same time but completed in 1930, was originally the dining hall and lounge for students living on campus, but was later converted to teaching and office space. It will also be returned largely to its original design and a mezzanine floor, built in 1963–64, removed.

Clockwise from top left: Architect's drawing of the proposed $10 million building (orange roof) to be located between the existing Business Studies Central, at left, and the Refectory; the Refectory in the 1950s; cartoon from *Bleat*, 'World Workers Removing Hostel Steam Pudding to Dominion Museum' .

Background image: The Main Building in 1962 as featured on the cover of the *New Zealand Journal of Agriculture*

Images supplied by Massey Archives.

After The Tempest...

With a performance of *Much Ado About Nothing*, Massey University's Summer Shakespeare enters its 10th year. Thom Conroy of the School of English and Media Studies writes.

I recently had the pleasure of attending the closing night of Massey's Summer Shakespeare performance of *Much Ado About Nothing*. The play was staged beside the reflecting pond in the Palmerston North rose garden. As the seasoned troupe of actors took to the flagstone and the water – the pond was thoroughly integrated into the performance! – a sublime evening descended. On the ground the audience was treated to floating candles, perfectly pitched lines, and the arrangements of a roving band of mandolin players. Overhead, Venus and Jupiter made a rare joint appearance in the sky, and this seemed like a sign to mark the auspicious occasion.

2012 is an especially important year for Massey's Summer Shakespeare series, as it is the 10th anniversary of this premier town-gown event. Each year the Summer Shakespeare performance is directed by the School of English and Media Studies' visiting artist in residence, and in 2012 this was Los Angeles-based director Amanda McRaven. Associate Professor Angie Farrow, executive producer of Summer Shakespeare and Chair of Massey's Arts Committee, was delighted to score McRaven as the 2012 artist in residence and Summer Shakespeare director. "We were so fortunate that she said yes to our invitation, and that we both immediately thought *Much Ado About Nothing* would be the ideal way to celebrate 10 years," says Dr Farrow.

Since the first performance of *The Tempest* in 2003, Massey's Summer Shakespeare series has become a major cultural happening in the Manawatū region, growing, as Farrow puts it, "from an event to an institution". The success of Massey's Summer Shakespeare arises out of the vibrant cultural atmosphere in the region, which is made possible, in part, by Massey's robust support of the arts. Alongside the Summer Shakespeare series, Massey and the School of English and Media Studies also sponsor a popular Writers Read national author series, a Festival of New Arts, a lunchtime Arts on Wednesday series, and an artist residency for directors, writers and artists working in film and screen media.

As the closing night performance of *Much Ado About Nothing* reached its happy conclusion and the quarrelling lovers were united in matrimony, the house lights came up to reveal a crowd bristling with enthusiasm. The performance had moved everyone, and you could feel it in the air: children skipped over the rose petals strewn on the flagstones, laughter rung out in the arbor, and Venus and Jupiter twinkled above like jewels. Ten years of inspiration and entertainment had come to an end, but the night was rich with the promise of what was to come.

Claudio (Matt Waldin) is in love with Hero (Rosie Anderson), while Beatrice (Maree Gibson) and Benedick (David Collins) wage a "merry war" bickering and declaring never to never marry anyone – let alone each other in Massey's 2012 Summer Shakespeare's *Much Ado About Nothing*.

Image by Anu Sefton

In March 2012, members of the Massey community gathered in the Great Hall of the Wellington campus Museum Building to recognise and celebrate the achievements of staff and alumni.















Massey Defining Excellence Award winners 2012

Sir Graham Henry, Sir Geoffrey Peren Medal, for his contribution to rugby and teaching; Stephen Jennings, Distinguished Alumni Achievement Award (*in absentia*); Sue Suckling, Distinguished Alumni Achievement Award for her contribution to science, innovation and business; Dennis Oliver, Distinguished Alumni Service Award for service to the community and nation; Luke Di Somma, Distinguished Young Alumni Award for his contribution to music.

Massey University Research Medals 2011

Professor Paul Moughan, Individual Research Medal; Dr Lara Shepherd, Early Career Research Medal; Professor Michael McManus, Supervisor Medal; Sleep/Wake Research Centre, Team Medal.

Massey Teaching Excellence Awards 2011

Dr Mark Henrickson (*in absentia*), Dr Nigel Parsons and Dr Gina Salapata, Sustained Commitment to Teaching Excellence Awards; Professor Tony Signal, Excellence in Teaching First-Year Students Award; Neil Ward, Excellence in Teaching Support Award; Dr Brennon Wood, the Darrylin O'Dea Award in the field of e-learning.

Sir Graham Henry	Stephen Jennings	Sue Suckling
Dennis Oliver	Luke Di Somma	Professor Paul Moughan
Dr Lara Shepherd	Professor Michael McManus	Sleep/Wake Research Centre, Team Medal
Dr Mark Henrickson	Dr Nigel Parsons	Dr Gina Salapata
Professor Tony Signal	Neil Ward	Dr Brennon Wood

Fruit and veg

The plants have a strange allure. Passers-by cannot resist the urge to browse, inspect, touch and sample. In Civic Square, in the heart of New Zealand's capital, tomato plants and nasturtiums are proving a hit. Researcher Amanda Yates is pleased.

This is *Edible Cities*, a project led by Yates, from Massey's School of Design, with collaboration from Wellington City Council and local communities.

Protected by – and sometimes escaping from – the six custom-manufactured pop-up gardens – 1.4-metre-square, shadecloth-wrapped macrocarpa enclosures – is a jungly mass of greenery. Pea, tomato and strawberry plants. Nasturtiums and fennel. Purple and scarlet runner beans. Rainbow chard. Rocket and lettuces.

The main limitation on what will flourish, says Yates, is the depth of soil: the height of the plant above ground is a proxy for the depth of soil it needs beneath.

Why are people so drawn to the gardens? One explanation may be the appeal of the homely and domestic in a place of hard surfaces and grand civic architecture. But the proof of the planting is in the eating. As soon as pop-up gardens popped up, says Yates, she could see people gravitating towards the fresh peas.

Today the tomatoes are ripening nicely and nasturtium petals garnish many an office worker's lunch.

"There's a guy I call rainbow chard guy. He's very thoughtful; he knows what he wants. He goes to one plant, takes a couple of leaves and moves on to the next."

The Civic Square pop-up garden is the successor to one in the Wellington suburb of Kilbirnie, which was sited on a council drainage easement between two streets.

Yates refers to sites like these – and other forms of inner-city community gardening – as urban acupuncture. "Little interventions to make people think," she explains. "It's about sustainability, about starting a conversation about the issues surrounding food in cities, about why people once upon a time used to grow food but maybe don't now."

Ania Upstill of the Wellington City Council, the project's official gardener and 'waterer', tends to her charges.

Postscript: the planters are now resident on rooftop of the City Gallery, sharing space with Nikau café.

In the early morning stillness, a ritual prayer rang out, and the stainless steel circle of pou – Māori ceremonial poles – gathered and reflected the first light of dawn. With the formal blessing, carried out by local kaumātua Pat Ruka (Ngāpuhi, Ngāti Porou, Ngāti Whātua) in early February, the Albany campus's 'Student Central' was ready for occupation.

Designed by architects Warren and Mahoney, the $15 million two-storey building houses student facilities and services, including club rooms, retail, banking, food outlets, study support, health and counselling, and Māori and Pasifika student services.

The steel pou, the work of Whakatane artist and carver Katz Maihi, carry designs and text digitally polished onto their roughened, bead-blasted surfaces. The first pou carries the word *Kakano* to represent the seeding of a thought, the seventh and tallest *Tiki Tiki o Rangi*, or the highest place in the heavens, in honour of academic excellence.

Accolades

Charles Darwin inferred the process of evolution from his observations of the natural history of his day and the fossil record. In his laboratory, Professor Paul Rainey – now Distinguished Professor Paul Rainey – observes evolution at work during the course of hours or days. His subjects are simple, rapidly reproducing microbial populations and his research tools are those of molecular biology and genetics.

The evolution of multicellularity is a current interest; Rainey has shown how populations of single cells can evolve towards co-operation, the first step towards multicellularity. Alongside other Massey researchers, he is seeking to understand such things as the evolutionary emergence of infectious disease, the ecology of the cystic fibrosis lung, and new approaches for killing pathogenic bacteria. Rainey is the author of nine full research publications in the prestigious journal *Nature*. His recent honours include being appointed a member of the Max Planck Society and External Scientific Member (Honorary Director) of the Max Planck Institute for Evolutionary Biology.

While the expensive 'big iron' of quantum physics – things like the Large Hadron Collider – are situated elsewhere in the world, New Zealand can claim at least one world-leading theorist. Professor Peter Schwerdtfeger – who has just been appointed Distinguished Professor, has published a number of extensively cited papers addressing the fundamental aspects of quantum chemistry and physics. His research embraces such things as the nanostructures of gold, man-made superheavy elements, chemistry under extreme conditions, and the quantum implications of molecular mirror-image symmetries. His most recent international accolades include, in 2010, the Royal Society Australasian Chemistry Lectureship and Humboldt Research Prize (a prize held by a number of Nobel laureates) and, in 2011, the Fukui Medal.

Massey's Director of Nursing Programmes, Associate Professor Annette Huntington, has been made a Member of the New Zealand Order of Merit in recognition of her services to nursing research. Dr Huntington is a leading researcher into the health of nurses and is a former Chair of the Nursing Council of New Zealand. She holds an honorary appointment as a research advisor at The University of Queensland and is a Colonel (Hon) of the Royal New Zealand Nursing Corps. She is also a member of the Health Practitioners Disciplinary Tribunal.

The appointment of distinguished professors is a rare honour bestowed on individuals who are adjudged to have achieved international eminence of the highest order in their fields of research and study.

Appointments

Professor Theodore (Ted) Zorn has been appointed Pro Vice-Chancellor of the College of Business.

Zorn, who has a PhD in communication (1987) from the University of Kentucky, Lexington, has worked in New Zealand since 1994, most recently heading the Department of Management Communication at the University of Waikato.

Zorn is the author or co-author of five books. His teaching was recognised with the Waikato Vice-Chancellor's Medal for Teaching Excellence in 2004.

Professor Hamish Spencer, from the University of Otago, has been appointed Director of the Allan Wilson Centre for Molecular Ecology and Evolution.

An evolutionary biologist, Spencer has been an investigator in the Allan Wilson Centre since it was founded in 2002. He will replace current Director Professor Charles Daugherty of Victoria University in August.

Hosted at Massey, the Allan Wilson Centre is a national centre of research excellence and is intended to advance knowledge of the evolution and ecology of New Zealand and Pacific plant and animal life, and human history in the Pacific.

Hawke's Bay mayors and councillors and Massey's senior leadership team meet for the signing of a memorandum of understanding between Hawke's Bay Regional Council and the university.

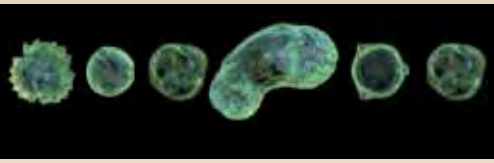
Fifteen business students from the University of Economics and Business, part of the Vietnam National University in Hanoi, have arrived on the Manawatū campus. The 15 students are part of the 2+2 Pathway Programme, a joint arrangement whereby the students, having studied for two years in their home country, complete their degrees with two years of study in New Zealand. These students began their study in Hanoi in 2009 and will complete their Bachelors of Business Studies, majoring in finance and economics, at Massey. Some of the students will take bridging English courses before joining their fellow students in semester two this year.

Creative arts students and staff gather in the Great Hall of the Museum Building at the Wellington campus to mark the beginning of the 2012 academic year.

All sorted

The Classifynder – revolutionising pollen counting

Malcolm Wood writes.



Katherine Holt has seen a lot of pollen. During the four years of her PhD investigating past patterns of vegetation in the Chatham Islands, many thousands of grains passed under the lens of her microscope, each one painstakingly magnified, identified and tallied.

How much time did she spend identifying pollen? "Gosh, I have never sat down and thought about it. It's a bit depressing. I would spend weeks on identification."

What does pollen look like under the microscope? Amazingly various. "Beech pollen is like a thickened disc, a doughnut without the hole, and around its edge are around eight little slits. Its surface is slightly bumpy. Flax is triangular, with a reticulate pattern on its surface, almost like a honeycomb. I could talk for weeks and weeks about the range of shapes and sizes."

Nonetheless, tallying pollen counts is essentially scientific hackwork: at once meticulous and skilled, repetitive and mundane. Holt, nowadays a Massey lecturer in physical geography, will be pleased to pass it on.

Her rescuer is a digital microscope imaging, identification and pollen counting system, going under the name of the Classifynder, developed by staff from Massey's School of Engineering and Advanced Technology led by Emeritus Professor Bob Hodgson.

The Classifynder initiative began as a meeting of minds between Hodgson and Emeritus Professor John Flenley, who is perhaps best known for his work in employing palynology to map the human and ecological history of Easter Island.

"John Flenley looked at how to apply a computer to the problem of pollen classification and I got involved in applying specialist technology to come up with a product," explains Hodgson.

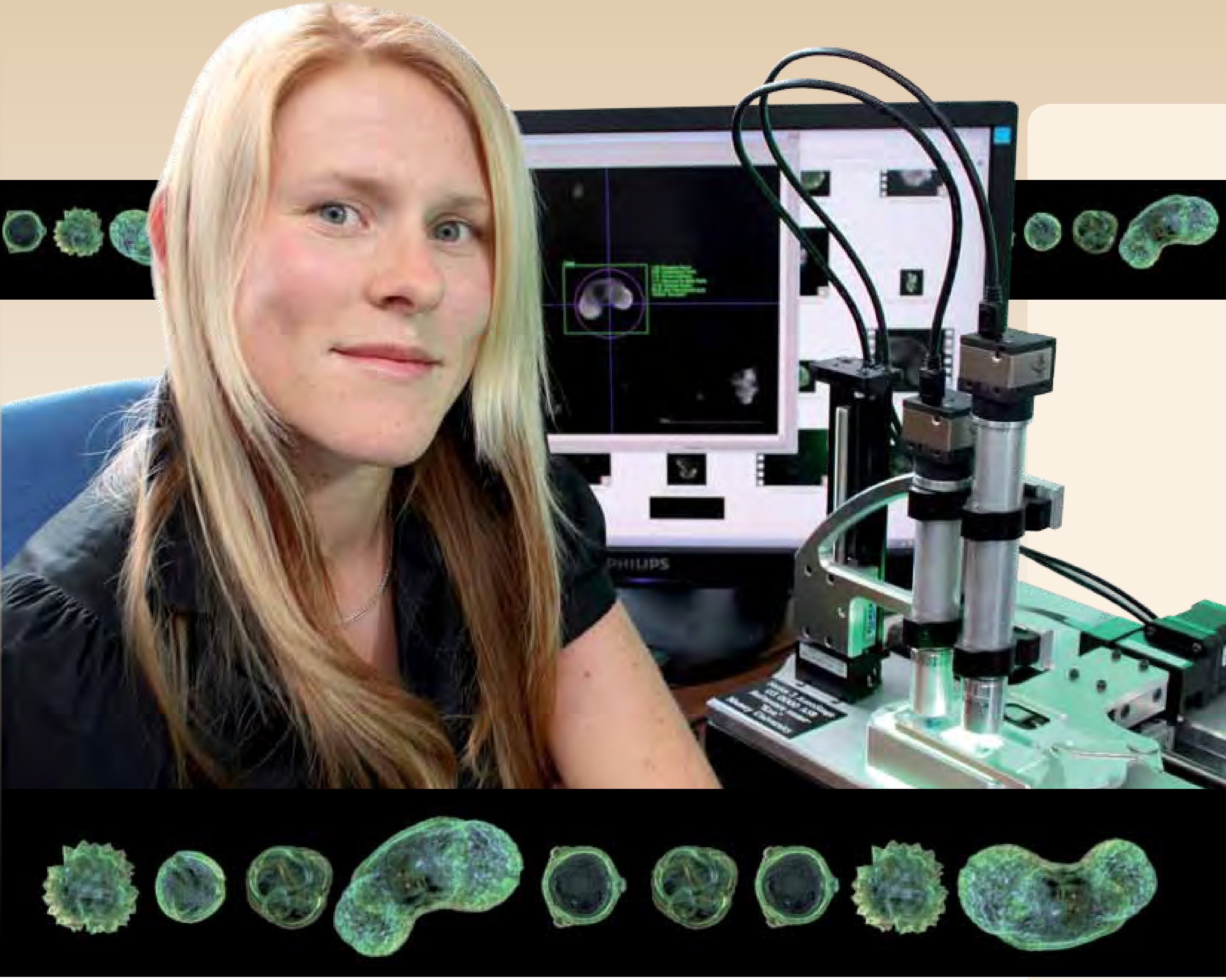
Now three generations on from its first prototype, the Classifynder is emerging as a commercial product: prototype machines are in use around the world. In Australia, the CSIRO (Commonwealth Scientific and Industrial Research Organisation) held an exhibition of images taken by the Classifynder to celebrate its purchase.

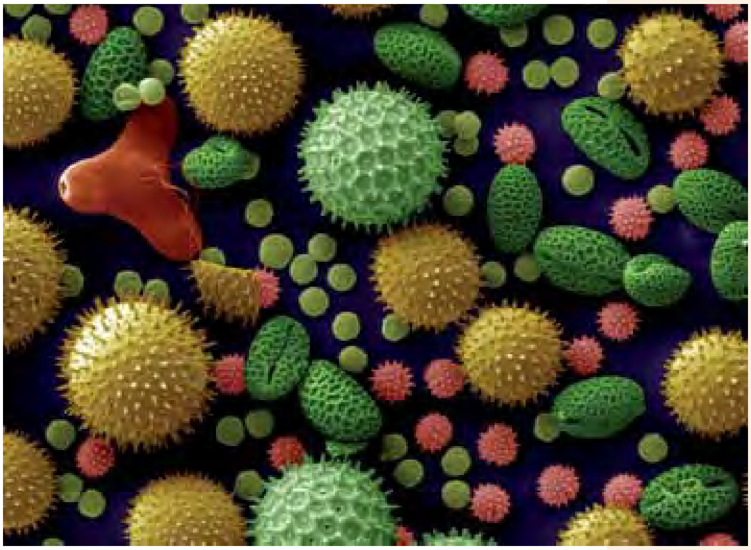
The Classifynder could end up widely adopted. The CSIRO, for example, intends to use it to identify how various insects and invertebrates function as pollinators within natural ecosystems. In biosecurity it can be used to identify the countries of origin of a range of products, notably honey. For allergy sufferers, it can establish airborne pollen counts and source species.

Does Holt wish she had been born just a few years later, so sparing herself all those hours at the microscope? No, for her it has been a privilege to play her part in the development of a new technology. It is the generation that is performing manual pollen counts in the period between the Classifynder's development and its wider deployment that she feels for.

In any case, she is not done with pollen counts just yet. Every day she returns to the microscope, but now it is to calibrate the accuracy of the Classifynder so that Hodgson and his team can tweak its performance.

"I want to check that it can deal with fossil pollen and broken pollen, things that pose some of the biggest challenges for automated palynology."





At top: Lecturer in physical geography Katherine Holt with the Classifynder and (inset) pollen grains as the Classifynder sees them. At right: Miscellaneous pollen grains (*William Crochot, Dartmouth Electron Microscope Facility*). Above left: Professor John Flenley. Above right: Professor Bob Hodgson.

12 SECRETS OF CULT LEADERS

Redmer Yska writes.

Dr Heather Kavan is drawn to religions, cults and 'altered states'. In the past decade, this senior lecturer at the School of Communication, Journalism and Marketing has journeyed deep into a landscape shunned by most academics, turning her dispatches into journal articles and conference papers.

Kavan takes an intensely practical approach to her investigations. In 2008, for example, she spent close to a year rising at dawn to meditate with Falun Gong practitioners. She sat in court for six weeks during the high profile trial following the exorcism-leading-to-death of Janet Moses, which led to five manslaughter convictions .

Along the way, Kavan has observed first hand how cult leaders control and often sexually dominate their followers. At a staff talk in March, Kavan drew on this knowledge to explain how such powers work in practice, categorising them into what she whimsically but seriously termed '12 tips for seduction'.

In a reference to the shocking example of Jonestown, Guyana (where 900 followers of cult leader Jim Jones voluntarily swallowed poisoned soft drink in 1978), Kavan said, "The tips are reasonably safe – none of them involves spiked Kool Aid".

People like Jones seemed to wield an invisible power that made people take an irrational liking to them, she said. "Few cult leaders have, for example, the charm and good looks of Pierce Brosnan or the musical ability of Bono, much less the media attention these celebrities attract."

Setting out her '12 tips' in turn, Kavan said the first prerequisite for a cult leader was to radiate self-love.

ONE: Adore yourself

"A cult leader is usually comfortable describing himself (I say 'himself' because they're usually male) as the greatest genius, the highest world leader, the most cosmic lover, and – by some secret spiritual logic – the only person in the world who doesn't have an ego problem."

TWO: Lift your vibe

"Charisma has been defined as a mysterious, exceptional quality by which a person appears to be endowed with supernatural or superhuman powers. In my experience, the mysterious quality is an ecstatic energy the charismatic leader emanates, which arouses a feeling of stoned-out bliss when you're in the person's presence."

THREE: Be thrillingly unavailable

"The old principle that 'the more difficult something is to obtain, the more it is valued', applies here – the more James Bond-ish you come across, the more valued you are. You can't fake it, unless you're Daniel Craig – so it's not about 'playing hard to get', but about genuinely having so much in your life that you're ecstatically happy regardless of anyone else."

FOUR: Link the seduction to a greater cause

"A common cult leader tactic is for the leader to claim that his purpose is to free people from their enslavement to others, including partners and family. The person then bonds emotionally with the leader instead, who feels free to take as many wives as he likes, while pretending to liberate everyone."

FIVE: Get an iconic photo of yourself

"Most cult leaders sell flattering pictures of themselves, which they encourage members to carry round with them, place on an altar or wear on a necklace. Rajneesh, aka Osho (the guru whose group did the bio-terror attack in Oregon, USA) went even further and used to give disciples boxes containing cuttings of his hair."

> "Few cult leaders have, for example, the charm and good looks of Pierce Brosnan or the musical ability of Bono, much less the media attention these celebrities attract."

SIX: Practise mind reading

"A cult leader often focuses like a laser beam on the pining devotee, making them feel like they're the only person in the room and their heart is an open book. As the leader appears to be able to read the devotee's consciousness, they hang on to every word, feeling that at last someone truly understands them."

SEVEN: Give the occasional breathtaking compliment

"A charismatic leader not only reads a person's needs and desires, they access ones you didn't even know you had. Therefore the most important criterion for a powerful compliment is that the speaker has read the person at a deep level. Another important criterion – and probably the trickiest one – is that the compliment has got to show the recipient something they never consciously realised about themselves."

EIGHT: Load your language

"When I read Charles Manson's prison interview, what stood out most for me was how frequently he used the word 'love'. According to his former followers he was 'always preaching love'. Even after masterminding nine brutal murders, he says in the interview: 'Anything you see in me is in you… If you see me as your brother, that's what I'll be. It all depends on how much love you have'."

NINE: Imply you're on the verge of fame

"Cult leaders often suggest they're on the brink of success and fame and imply that followers will go down in history as part of the greatest story ever told. To get a share of the recognition, devotees then start vying to be their closest disciple. The lesson from this is that a well timed suggestion of impending success can intensify attraction."

TEN: View any rejection as superficial or short term

"Cult leaders see themselves as the fountain of all love, so it follows that everyone, whether they realise it or not, is craving them. According to this logic, any rejection is superficial or short term. I'll never forget the leader who said to me, after I'd decided against pursuing a research interest in his group, 'That's all right, you're not ready for me yet'."

ELEVEN: Show unshakable conviction

"There's a whole bag of tricks behind this certainty, usually involving travelling to mysterious places to gather superior wisdom. The performance of an extraordinary or heroic feat also helps, although this can be difficult to contrive."

TWELVE: Become a receiver

"In one of the pieces of research I did, the leader stayed in my house and, through that proximity, I experienced another key to charisma – gurus are very good at receiving from other people. In fact they seem to expect everyone to run around anticipating their every need and giving them presents.

"And so my final cult leader tip is: Become so open to receiving presents and acts of kindness that the thought of giving to you just lights up the pleasure centres in people's brains." ■

New Zealand's fertile, well watered landscape, its temperate climate and the ingenuity of its farmers and horticulturists have long made it an efficient, low-cost producer and exporter of high-quality food products. Fifty years ago, such products largely took the form of unprocessed, low-margin commodities. Today, the shift is to more sophisticated, value-added foods.

Where are those products developed? On Massey's Manawatū campus the Institute of Food, Nutrition and Human Health operates a food pilot plant (officially known as FOODPILOT), partly as a teaching and research facility for staff and students and partly as a facility for manufacturers, who are using it to trial new product formulations and manufacturing processes.

The pilot plant includes secured space for confidential work and is fully supported by skilled technicians and the immense fund of research expertise contained within the institute.

Massey's food technology graduates are highly sought after, often being signed up by employers before they have finished their studies.

Pictured alongside some of the pilot plant's array of equipment are, left to right, left to right, Byron McKillop, Garry Radford (Plant Manager) and Warwick Johnson (Plant Client Manager).

Inside the falling film evaporator, a steam-heated film of liquid flows down the inside walls of the stainless steel tubes, becoming concentrated as it goes. Because a partial vacuum is maintained within the tubes, evaporation occurs rapidly at a relatively low temperature. The process is therefore ideal for heat sensitive foods such as milk and fruit juices. The pilot plant operates a linked spray dryer for turning concentrates into powders.

A twin-screw extruder is used to form cereals-based snack foods and pasta, and confectionery, using a combination of heating and intense mixing. This small-scale extruder allows batches with different formulations to be produced swiftly for evaluation.

By removing air, and therefore oxygen, vacuum packing significantly extends the shelf lives of many food products and, used in combination with flexible packaging, it also reduces packed product volume. Pictured is a CRYOVAC vacuum packaging machine.

Canning was first introduced as a method of preserving food in the early 1800s, when it was developed for Napoleon's armies. It remains a staple of food preservation, offering a high-quality shelf life of one to five years at ambient temperatures. Pictured is a can seamer.

The use of pasteurisation – the heat treatment of foods at temperatures that destroy dangerous micro-organisms – dates back to the 18th century, when it was applied to cream to improve the keeping qualities of butter. Ultra-high-temperature (UHT) sterilisation – the process applied by the equipment shown here – holds the product at a temperature of around 145°C for a few seconds. UHT treatment is used to sterilise dairy products and beverages. Combined with aseptic (sterile) packaging, it can lead to dramatic increases in shelf life.

Taking care

It's fair to say nurse Andrew Cameron relishes a challenge, whether it's confounding the gender stereotypes of his profession or working with victims of war and addiction. The Florence Nightingale Medal winner talks to Andrea O'Neil.

It's hard to believe that Andrew Cameron became a nurse because it seemed like a nice, comfortable job. After studying nursing and then midwifery in the 1970s, Cameron worked on a remote Australian island treating an Aboriginal population plagued by alcohol and violence, then became the sole health professional for 250 isolated miners and sheep farmers in the outback. Now he spends his days in war-torn countries training medical staff and giving primary care while avoiding bombs and kidnappers.

Cameron, a 1984 Wellington Polytechnic School of Nursing (now Massey) postgraduate nursing alumnus, was awarded the New Zealand Red Cross's Florence Nightingale Medal last year, the highest international distinction a nurse can receive. He is one of a few New Zealanders to be awarded the honour, which is given to about 40 nurses worldwide every two years "for courage and devotion to the sick and disabled or to civilian victims of conflicts".

"It was pretty amazing. I was the 25th Kiwi in 100 years to receive the award so that was pretty cool I reckon," Cameron says. "I don't come to these places to get medals or anything; it was just really nice to get a pat on the back."

Cameron, 55, is on his seventh mission since starting with the New Zealand Red Cross in 2005. He currently calls Afghanistan's Kandahar province home, but has been posted to Kenya, Sudan, Iraq, Yemen, South Ossetia in Georgia and twice before to Afghanistan. The work separates him from his Germany-based wife and two daughters, but he is committed to it. "You definitely have to be the right kind of person. You have to leave home for nine months of a year. It can be quite disruptive. On the other hand it's quite an adventure," he says. "It's work but it's really immediately rewarding."

Eradicating polio from southern Afghanistan is Cameron's current assignment, but he has a wide brief. A typical day might see him travel to an international military base to assess the health of POWs, or train Afghani taxi drivers in first aid, vital in a region where ambulances are scarce, or check prisons for any signs of health-in-detention abuses. "We make sure detainees are properly cared for according to the Geneva Conventions, and that there's nothing sinister going on."

Information about working for the New Zealand Red Cross can be found at www.redcross.org.nz/aidworkerprogramme.

Men could be more specifically targeted for recruitment into the profession, he says. “Maybe some universities could advertise in a blokey sort of way.”

When Cameron travels with any of his 35 Red Cross colleagues, they take separate cars to ensure at least one of them arrives if kidnappers approach.

Cameron was a 19-year-old welder in Hawke’s Bay in 1976 when he visited a workmate in hospital with burns. “It was a foul, rainy, cold day in winter, and the ward was nice and warm; the nurses were coming in with the evening tea trolley. There was a male warden and I asked him what he did; he said ‘I’m a nurse trainee’,” Cameron says. “I thought about it for a few days and made enquiries. When I left work my mates at work said, ‘That’s not a job for a man’.”

Being male was a constant liability during Cameron’s early career. When he began training at Hutt Hospital men couldn’t graduate as registered general and obstetric nurses, a quirk amended in the 1977 Nurses Act. Still, Cameron was sent to a urology ward while his 43 female classmates studied obstetrics, which he had to learn from a textbook. Despite this, the subject grabbed him, and he left for Melbourne to become a midwife, a career option not offered to Kiwi men then.

A gender imbalance persists in nursing – men still only make up about 7 percent of Kiwi nurses, and many of those are in administration, Cameron says. The Florence Nightingale Medal was not awarded to male nurses until 1991. Cameron still faces stigma from strangers. Men could be more specifically targeted for recruitment into the profession, he says. “Maybe some universities could advertise in a blokey sort of way.”

Men bring a kind of balance to the nursing workplace, not over-discussing and analysing issues as much as women do, Cameron says. “I’m not a talkative sort of person. I speak when I’ve got something to say,” he says. “Because I’ve worked with women for 35 years, sometimes it gets like a bit of a henhouse. You need to try to bring a different light to the subject.”

Male or female, all nurses face the problem of a talent exodus to Australia, where wages can be 30 percent higher, Cameron says. Life across the ditch isn’t all roses, however – nurses are more likely to get sued by patients in Australia, he says. “You really have to be on your guard and be careful what you say.” Cameron no longer practises midwifery owing to a fear of litigation. “If you get accused of something it can destroy your career.”

Australia offers career opportunities unavailable in New Zealand, however. In 1992 Cameron became Director of Nursing in a 10-bed hospital on Mornington Island off Queensland, an Aboriginal community. “It was a tough-as-hell job,” he says. The violence he dealt with for seven years prepared Cameron for his first Red Cross mission treating Sudanese refugees in Kenya. “I’d seen a fair bit of violence and aggression, a lot of blood and a number of open bullet wounds,” he says. “In a way [Mornington Island] was just as tough as doing this work. The Aboriginal problems are quite deep.”

Cameron was named Australian Nurse of the Year in 2004 after a further two-year stint as the only medic in former goldmining town Cue.

A bigger challenge then beckoned. Cameron had wanted to work for the New Zealand Red Cross since the 1980s, and had completed his postgraduate diploma at Wellington Polytechnic to increase his chances of being selected for aid work. “I thought I’d better get some academic qualifications,” he says. “It was good for me to catch up with all the theories and the social side of nursing rather than the technical side. The way I trained it was purely medical.” In 1995 he gained a Master’s degree in tropical medicine at the University of Queensland.

Cameron sees himself working on different New Zealand Red Cross missions for another 10 years. “Why not? You don’t live forever. You’ve got to try different things.”

Facing page: Cameron makes one of his daily rounds of the children’s wards in Juba Teaching Hospital, southern Sudan. Cameron was head nurse and director of nursing at the 480 bed hospital during a Red Cross mission in 2007.

Massey offers a range of nursing study options. They include Bachelor’s, Master’s and doctoral programmes and a postgraduate diploma and certificate.
The Bachelor of Nursing is a three-year nationally and internationally recognised programme offered in Auckland, Palmerston North and Wellington.
In 2011, 214 students gained graduate or postgraduate qualifications through Massey.
To find out more, visit www.massey.ac.nz/nursing.

This page, at left: Cameron impresses a South Ossetian widow with an attempt to chat in her native language. The Red Cross was distributing seed potatoes for spring planting in isolated and remote villages in the Leningor Province of South Ossetia in 2011.

At right: Villagers in South Ossetia were always happy to see Cameron and other Red Cross workers arrive with food parcels containing flour, cooking oil, beans and other essentials. Cameron delivered parcels each month to 300 people who were still affected by the 2008 war.


LUNCBURN
FREEZING

chain reaction

A pair of Longburn freezing workers' singlets at the Te Manawa museum helped reawaken historian Kerry Taylor's interest in labour history. He now plans to tell the story of the radical meatworks that employed Manawatū people for nearly a century. Redmer Yska reports.

Labour historian Kerry Taylor hails from a long and proud line of freezing workers. As a child growing up in 1960s' Hastings where the meatworks dominated the landscape, he remembers hearing hair-raising tales of family members working on 'the chain'.

"My father's father was a solo butcher at Tomoana and on my mum's side there were three generations who worked at Whakatu. My grandfather had only one arm; I'd always thought he'd been wounded in the war, but it turned out that it was caused by an accident at work: half a frozen bull fell on him."

In 2010, Taylor, senior lecturer and head of the School of History, Philosophy and Classics, renewed his family connection.

The Te Manawa Museum Society, of which Taylor is Chairperson, proposed to publish a book based around objects drawn from the museum's collections.

"I'd always thought he'd been wounded in the war, but it turned out that it was caused by an accident at work: half a frozen bull fell on him."

"Our aim was to identify 40 singular objects to help commemorate the museum's 40th birthday," he explains.

"We spent months picking through Te Manawa's vast and richly diverse treasures, scattered across three collection stores in the city."

Taylor found himself drawn to a pair of freezing workers' singlets – one black, one white – crudely stencilled 'Longburn Freezing Works'.

"It became clear to us that the singlets, both dating from the 1970s and located in local op shops, were emblematic of distinctive local stories," he says.

Standing in the temperature-controlled collections room at the back of Te Manawa where the garments are lovingly stored, Taylor notes that the black singlet is usually associated with shearing and sporting heroics – or with affectionate rural figures like Fred Dagg and Footrot Flats.

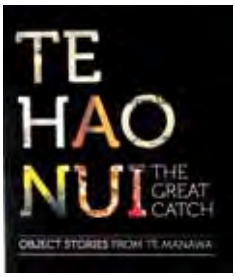
"The connection with the radical freezing worker, let alone the men and women workers found in the militant shed that was Longburn in the 1970s, is rarely if ever made," he says.

In his essay about the singlets and the works where they were worn – which would appear in 2011 as part of *Te Hao Nui: The great catch. Object Stories from Te Manawa* – Taylor wrote: "It is possible to take a number of journeys using these freezing workers' singlets as a point of departure".

Taylor would experience this first hand as he revisited the long and often-contentious story of Longburn, focusing on the families and communities – Longburn, Palmerston North, Rangiotu and further afield – that supplied its workforce from 1889 to 1986.

Not only did he rekindle an enduring professional interest in labour history, he gained fresh and important insights into the centrality of the meat industry to local, regional and national narratives.

He also came to acknowledge that a vital part of the bigger meatworks story was in his blood. And he was struck by the relevance of the (largely



Te Hao Nui: The Great Catch
Edited by Fiona McKergow and Kerry Taylor, RHNZ Godwit
RRP: $65.00

Longburn freezing worker stripping the skin from a sheep carcass on the production chain. Photographed by *Evening Post* staff photographer Ross Giblin 10 August 1985. National Library: EP/1985/3581/15-F

Arthur Tonan gutting sheep at the Longburn Freezing Works, Longburn, Manawatū. Photographed by *Evening Post* staff photographer Ross Giblin 10 August 1985. National Library: EP/1985/3580/32-F

Meat processing – the fortunes of an emblematic industry

The Longburn works opened in 1889, seven years after our first shipment of frozen meat left for Britain. One of 21 works operating at the turn of the 20th century, Longburn belonged to an industry that seemed unstoppable.

By the 1970s, the number of meat export works had more than doubled to 44. Longburn itself was booming: processing 10,000 sheep and lambs and 500 cattle daily; its annual kill topped a million.

But revolutionary change was coming. Open access to the British market ended in the early 1970s. The meat industry meanwhile faced a revolution in processing and packaging technology and hygiene standards. In 1980, the entire industry was deregulated.

Longburn closed in 1986, one of nine large multi-chain plants closed in just four years. When it closed, some 900 men and women lost their jobs.

historical) freezing works experience to many Kiwis, often as casual work during university holidays.

A prominent and widely published expert on New Zealand labour history, Taylor now plans to tackle the untold story of the famously militant Longburn meatworks He has already begun work on what will effectively be a workers' history of the works, a project with a special focus on unearthing and explaining its militant trade union tradition. He plans to use oral history to capture the voices of the many forgotten workers of Manawatū who gave so much of their lives to Longburn.

"Working the chain in a place like Longburn was unpleasant and uncomfortable. Employees faced a short season of unpredictable work every year. The place smelled terrible. People would be covered in animal blood and faeces at the end of a shift. Knives and complex machinery made work dangerous. Injuries were common, and often serious."

Taylor says he can understand the high level of crankiness in the workforce. Through the course of the 20th century, freezing workers were among the occupations most associated with militant trade unionism. But why did the Longburn workforce in particular foster such an enduring radical tradition?

"In the context of the meat industry as a whole, Longburn was always a militant shed. Unionism at the works went back at least to 1907, when the newly recognised union negotiated an award that included a union preference clause. Longburn became embroiled in a number of nationally significant incidents, including the 1951 waterfront lockout.

"After a period of rebuilding, a militant culture emerged again in the 1960s. In the eyes of many local farmers, Longburn was a radical hotbed, holding them, and the country, to ransom with frivolous and unreasonable demands."

Taylor says there is much more to the story than unreasonable demands and greed. "Some of the explanation spans the whole sector, but specific interpersonal dynamics were clearly at play in Longburn. Tom Hastie, a manager in the post-war era, was heard to say that 'no worker had a permanent job at Longburn'.

"Unions could be just as confrontational. Across the bargaining table from the late 1960s – sometimes wearing a black singlet for maximum effect – was union leader Roger Middlemass. Under his leadership, matters were decided collectively, creating a positive feeling among the Longburn workers. They formed a close-knit group closely connected to their communities. But the employers despaired."

Taylor recalls that in October 1986, Middlemass and his men were locked out after refusing to agree to faster work speeds, longer workdays and the loss of various conditions. The works never reopened.

By the time it closed, strict hygiene conditions had spelled the demise of the iconic black singlet, deliberately worn long to keep a butcher's back warm as he toiled with a knife.

"No doubt many black singlets found their way to op shops. Many families and communities across Manawatū found their lives forever altered by the closure of 'their' local freezing works. It is time for us to hear their voices." ■

Foreman Ian Cruden and byproducts manager Keith Rose in a freezer at the Longburn Freezing Works. This photo can be seen as a metaphor of the place of freezing workers in the literature on the meat industry. Frozen carcasses dominate the humans here, and in the literature. Photograph taken 10 August 1985 by *Evening Post* staff photographer Ross Giblin. National Library: EP/1985/3577/16-F

Immersive learning

Jennifer Little meets Professor Marti Anderson, who is assessing what is happening to our marine ecosystems.

In her office on the Albany campus, Professor Marti Anderson is fresh from a diving expedition in the Poor Knights Islands marine reserve and full of enthusiasm. She and her PhD student Adam Smith have been counting reef fish. She is particularly taken by the number of triplefin species. "New Zealand is the triplefin capital of the world," she declares.

In the background her computer screensaver cycles through its images: Monet's water lilies (Anderson's undergraduate degree is in the liberal arts) and the gothic horror face of a hagfish, with its seried rows of teeth.

Last year the hagfish made it onto a great many other screens. In a Marsden-funded study of deep-sea biodiversity, Anderson and her colleagues at Te Papa captured the first footage of a hagfish at home. Before the deep-sea cameras, various sharks, groper and other predators take bites at the eel-like creature, only to recoil, their mouths filled with noxious slime. Repellently fascinating, the hagfish clip went viral.

This is one side of Anderson: the marine ecologist, explorer of the deep. Then there is the other Anderson: the mathematician, statistician and, on occasion, software developer.

Professor Anderson's recent work includes a Marsden-funded study of deep-sea biodiversity. As part of this project, Anderson and her Te Papa marine science colleagues sent cameras into the sea close by White Island, Great Barrier Island and other spots. The images of the hagfish, shown left and right, were captured during the course of the study. She has also been enlisted by the Auckland Regional Council, the National Institute of Water and Atmospheric Research and the Department of Conservation for marine monitoring and environmental impact assessments. Her recent diving expedition off the Poor Knights Islands marine reserve was in connection with an annual survey of marine biodiversity around New Zealand, a personal project Anderson started 12 years ago. To view the hagfish footage, visit www.definingnz.com/hagfish.

The combination is a rare one. Ecologists, explains Anderson, work within a discipline known for generating 'messy' data. Statisticians, on the other hand, "are creative people who adore simplicity and elegance in their models".

United States-born Anderson first came to the Southern Hemisphere on a three-month Richter Scholarship to study Crown-of-Thorns starfish, which were then decimating the Great Barrier Reef. She then embarked on a PhD at the University of Sydney, studying organism settlement and succession in tidal estuary oyster farms around New South Wales. (Now something of an oyster connoisseur, Anderson can distinguish Australian estuary-of-origin by taste alone.)

She was fortunate to have as her supervisor an inspirational marine ecologist, Professor Tony Underwood, a thought leader in the emerging fields of experimental design and ecological statistics. After graduating with her PhD and picking up a further Masterate in mathematical statistics, Anderson took up a position as a lecturer at the University of Auckland and then, nine years later and having advanced to the rank of Associate Professor, moved to Massey. Here, at age 39, she became New Zealand's youngest-ever full professor of statistics.

As a statistician, Anderson looks at ecology through the lens of sets of numbers and how they vary. "When you try to count numbers of anything, it's going to vary day to day. Some individuals die, others are born. Every single species is a variable – it has an average, a variance and a tendency to be highly aggregated, or not. Every species is different and it's all happening at once."

The ecological statistics package PERMANOVA+ (see sidebar), which Anderson helped to create, is now widely used around the globe.

How does Anderson view the prospects for the planet's ecosystems? She is oddly optimistic. If we understand what is happening, there are choices to be made.

If we understand what is happening, there are choices to be made.

"People always think about environmental assessment as being anti-development, but there are ways that we, as humans, can enhance the environment by our activities.

"We are in a scary position of having a lot of power relative to other species to change our environment – and that can be productive or destructive." ■

There's an app for that

PERMANOVA+ (PERmutational distance-based Multivariate ANalysis Of VAriance) is an ecological statistics package for analysing biological systems and how they change over time and space. PERMANOVA+ applications have been used to assess and monitor ecological communities ranging from bacteria in the Antarctic to worms in the depths of the North Sea and butterflies in Borneo.

Created by Professor Anderson in collaboration with developers Ray Gorley and Bob Clarke and first introduced some 15 years ago, PERMANOVA+ is used globally by scientists and environmental agencies. Last year Anderson ran PERMANOVA+ workshops in the US, Portugal, Australia and the United Kingdom.

What they did last summer

While most of us were on holiday, a team of Massey University education researchers ran an ambitious project aimed at halting the 'summer slide' usually suffered by struggling readers. Promising early results suggest they've made an important breakthrough. Bevan Rapson writes.

You might think it's obvious that kids don't learn much during their summer holidays. Sleeping late, watching daytime TV and generally goofing off aren't activities designed to boost academic performance.

That's all fine – everyone needs a chance to recharge their batteries for the year ahead – but for some children, their summer hiatus doesn't just mean their learning is suspended: they actually go backwards.

Struggling young readers have been proven to lose the gains they have made so painstakingly during the year and therefore face a demoralising return to school when the holidays are over.

Aiming to counter this 'summer slide', Massey University literacy expert Professor Tom Nicholson and his fellow researchers ran a summer programme involving 600 Year 3 children from 10 Auckland primary schools.

Building on a trial at Flat Bush School the previous year, the $300,000 project, backed by a private donor, delivered 11,000 books to children's homes during January. All the children were tested before and after the programme and, while it's early days, Nicholson is delighted with the promising initial results. "We've struck gold in terms of intervention," he says. "This is a new breakthrough."

While reading programmes on which he has worked previously have had positive results, this was on a much greater scale. "We're just reaching so many kids with this approach." And importantly, it seems that low achievers have benefited most. Sheer practice in reading during the holidays seems to pay off "and it's paying off for the ones who we wanted".

The logistics were challenging, with work starting back in October to prepare for the summer ahead. "It's like building a house," says Nicholson. "There's a lot goes into the foundation." First, seven low-decile and three decile 10 schools were found to take part in the project. Each of the 600 children involved, except for a control group of children who got math books instead, was given the chance to choose the 25 books they wanted. The big number of books for each child was possible because of a whopping discount from legendary New Zealand publisher, Wendy Pye, who supports the research. Then, during January, book-droppers organised by each of the schools visited hundreds of homes four times each to ensure the children had a new book to read every two days. Usually the visitor involved was a member of the school community; in one case, it was a principal who welcomed the chance to meet parents and see children in their home environments.

Books were dropped on the first three visits. On the last, feedback and reading logs were collected. One group in the study was also given quizzes, with the aim of getting children to think about vocabulary. Generally, parents were positive about the programme, says Nicholson. "My feeling, just talking to the parents, is they were really keen to do it. They liked the idea of something they could do and help with." That goodwill tended to be there, whatever the families' economic circumstances. "We're dealing with the very tough end of the market here, in the poorest part of Auckland," says Nicholson. "I got the impression that the parents who we saw anyway really wanted the best for [their children]. They just didn't know what to do and this was giving them some specifics about how they could help."

The children in worse-off areas also tend to have plenty of free time in the holidays, with little chance of trips away and other activities. Nicholson: "After a week of holidays I think most of these children are kind of bored. That's what the teachers say. That they are just kind of sitting on the back step, not sure what to do."

Although it seemed the programme asked a lot of the children, it had many positives attached. "They were books that they specially chose; somebody was

"We've struck gold in terms of intervention," he says. "This is a new breakthrough."

Professor Tom Nicholson

>>>

interested in them over the holidays, asking them how they were going and all that kind of thing."

Nicholson, a veteran of four decades in education research, is an Australian by birth, although after 35 years in New Zealand you have to listen carefully to detect any hint of an Aussie accent. Teaching New Zealand students, he says, "You've got to talk like them, otherwise they don't understand you".

After growing up in Sydney's western suburbs Nicholson taught high school for five years, often baffled by the lack of reading skills of many of his students, before landing his first research job in South Australia, which led to the completion of a doctorate at the University of Minnesota in the United States. Marrying a New Zealander, as well as wanting to engage in innovative teaching, brought him to this country and academic jobs at the University of Waikato and University of Auckland before he became a professor of literacy education at Massey's School of Education in Albany in 2006. His work in his specialist field three years ago won him election to the International Reading Association's Reading Hall of Fame and in 2010 the Minister of Education invited him to join an Independent Advisory Group.

He has worked on a range of different kinds of intervention aimed at struggling readers, but says the previous approaches had more drawbacks, such as taking children away from their classroom work.

While the latest project was operationally demanding, giving struggling readers books to read over summer is actually a simple idea. "If you are reading 25 books, getting a lot of practice, things after a while start to come together," says Nicholson. "You start to recognise words more easily, the whole process of reading just becomes that much easier for you, and you start to see things you didn't see before."

"The fact that results are showing positive signs is a double-whammy for me because it is a project [that] would have fallen apart at any stage if the 10 schools involved weren't committed and determined to make it work. We couldn't be at those schools and with those people 24 seven. The commitment from them was colossal."

PhD student and primary school Associate Principal Louise Turner

A decade ago, Aucklander Matthew Abel saw a story in a local newspaper about a holiday reading initiative at a Grey Lynn school, not far from where he lived. He was sufficiently impressed by the programme – led by Tom Nicholson – that he got in touch with an offer of assistance, starting a relationship that continues today with his support for the summer-slide programme. "There wasn't much money involved," he recalls of his first donations. "I thought, 'Well, it's a good way to make a small contribution and to see how it goes'."

Abel, a consultant, mainly on financial matters in developing countries, donates money through a charitable trust and likes to maintain an involvement in projects he supports.

"You can give money away, which is fine, but it's probably better to have some involvement and try to see whether it makes a difference." With the summer-slide project, that included visiting each of the 10 schools involved when children were choosing books supplied through his generosity. "I was kind of keen to just observe but then I ended up assisting a bit when they had the children choosing books."

Abel's backing for Nicholson's programme is partly motivated by the obvious importance of reading in children's lives. "There are many things that help a young person or prepare them for life," he says. "But I suppose being able to read and having numeracy is a basic sort of foundation."

Like Tom Nicholson, Louise Turner didn't have much of a holiday between 2011 and 2012. The Associate Principal at South Auckland's Flat Bush School, who is involved in the summer-slide research as part of work towards her PhD, says with a laugh that "pretty much the whole of summer" was consumed by the demands of the project: "It has been an incredibly full-on six months or so". That just makes the positive results so far all the more rewarding. "The fact that results are showing positive signs is a double-whammy for me because it is a project [that] would have fallen apart at any stage if the 10 schools involved weren't committed and determined to make it work. We couldn't be at those schools and with those people 24 seven. The commitment from them was colossal."

A teacher for about 25 years, Turner was hands-on at every stage, from the formulation of the initial idea with Nicholson and Abel, through the choosing of books by children at the 10 schools to overseeing home visits and in recent weeks the collection and collation of results.

Excitement was high when the children came in small groups to choose their 25 books, she says. "They were just so motivated and excited by the fact that they could choose the books and that they were going to keep them."

Turner particularly enjoyed the home visits to children from Flat Bush. "For me in my role at the school it's actually really nice to be able to get out and get into the homes and talk with the parents, the children and all the brothers and sisters who were there."

Yes, hardship was evident among families from the seven low-decile schools in the programme, although it was nothing with which she was unfamiliar. "We're used to kids coming to school without shoes and food and all the rest of it," she says, although she did notice the difference when she visited children from three decile-10 schools in the study. "It was just such a shocking contrast to see."

Reports of 'non-compliance' were rare, with only isolated cases of families going away unexpectedly or of adults concerned that the children were having to do school activity during the holidays. "We had more than 600 kids – it's huge – so naturally you're going to get a few in the mix who perhaps aren't as enthusiastic." It was particularly rewarding to see extended families taking an interest in the books

programme: "You would see the whole lot of them, all sharing in these books and talking about them. It was really lovely".

Completed figures to date indicate that children in the study who got the summer books intervention made more progress than the control group, a highly encouraging indicator for Nicholson and the research team, especially given how hard it is to raise literacy levels of low-decile children whose homes have few books and often lack internet access.

The children in the study were all finishing Year 3 and the initial school stage, during which big progress is usually made in reading. "It's the first three years of school where you've got these huge increases in reading ability," says Nicholson. "Then it starts to plateau at Year 4."

Often, the transition from being a struggling reader can be swift, he says. "One week they are not reading, the next week they are starting to read. It just all starts to come together."

While the big improvers in the study made gains, they probably have more improvement ahead of them. "They are still not there yet," says Nicholson.

Overall, he says the study has "a nice feel" to it. It involves parents in their kids' education, and falls outside the school year so children aren't being removed from their regular classes to be part of it. "A lot of the interventions are pull-out programmes and there are a lot of downsides to that. Although you get results, the other kids know that you're getting taken out and there's all that sort of stigma of being the remedial reader. This one hasn't got any of that baggage."

The 'summer slide' has been identified in research overseas, and various attempts made to find ways of dealing with it. In the past few years researchers at Harvard and in Tennessee have worked on programmes designed to combat the problem.

The Harvard project, which mailed books to homes during summer, has yielded positive results for middle-class kids but hasn't enjoyed the same success with children from lower socio-economic groups.

For the Harvard study, those groups were largely Latino communities in California, while for Massey's the low-decile schools had a high proportion of children from Pacific Islander families. "What's good about [Massey's] result," says Nicholson, "is that we used the same scientific approach, with control groups and randomisation, and we've come good with the lower socio-economic kids."

The Harvard team has recently won US$15 million, made up of $12 million from the US Government, and $3 million from the private sector, as part of the US Government's 'Investing in Innovation' (i3) programme. Their goal is to extend, validate and upscale the summer books research to 10,000 children. Nicholson and his team can't realistically expect that kind of backing but are keen to follow up on their project's success. Nicholson says the result has implications for education policy and that the Ministry of Education and the Government should look at it. "Here's a way of actually helping poor readers from any background by setting up a reading programme for them during the holiday break."

Although it's unknown yet whether funding will be available, he'd like to explore the subject with more research, hoping to roll out the summer programme to 10,000 children in New Zealand, while at the same time researching the effects of doing that.

"But I really think it's worth looking at the policy side of it because it seems to me that this is one way of closing the gap and it's a way that's practical and can reach a lot of children.

"Although we do a lot of different things, this one seems to me to be one that makes a lot of sense."

Potentially, he and his team could look to produce a package to roll out to schools. "One option is for schools to see what they can do within their own resources," he says. On a practical level, the libraries in schools are already full of books that sit unread during the holidays. Nicholson: "They might lose some books giving kids books to take home during the school break, but the pay-off would compensate for that, I think." The approach could also work in combination with something like the Duffy Books in Homes programme.

He emphasises how hard it can be to get improvements from struggling readers in low socio-economic areas – "It's very hard to move the needle on these ones" – and believes the effects of having people dropping off the books and encouraging the children probably played a part in the project's successful result.

"I think what's really exciting about it is we've been able to do what the Harvard guys didn't do and strike gold in terms of the poor readers.

"What they did is they mailed the books to the kids and the kids had to fill out an evaluation. Nobody actually ever visited them. I think maybe that's why in California it might not have worked. This one did work and trying to figure out why is going to be interesting.

"The very fact that we've been able to get a result for these kids means that, yeah, we have tapped a new vein. This is so exciting for us, for what we can achieve. We are leading the rest of the world in terms of doing this stuff."

> "You can give money away, which is fine, but it's probably better to have some involvement and try to see whether it makes a difference... I ended up assisting a bit when they had the children choosing books."
>
> Financial consultant and philanthropist Matthew Abel

Doing the math

$$SE(g[x,y]) = \sqrt{\left(SE(x)\frac{\partial g[x,y]}{\partial x}\right)^2 + \left(SE(y)\frac{\partial g[x,y]}{\partial y}\right)^2 + 2cov(x,y)\frac{\partial g[x,y]}{\partial x}\frac{\partial g[x,y]}{\partial y}}$$

Malcolm Wood talks to Professor Doug Armstrong, co-author of *Reintroduction Biology: Integrating Science and Management.*

Friendly, curious, bold: these are the adjectives commonly used to describe the North Island robin. Take a breather anywhere in the bush where robins are present and you are soon likely to find yourself the object of an intent, bright-eyed investigation. Perhaps, if you are quiet, the bird will fleetingly alight on a boot or a pack, before letting loose with a delicate squirt of white guano and moving on, your interest having passed. Robins are easy to like. And robins are also easy to study.

As a research subject, the robin has many merits: it is territorial, relatively fearless, easily observed and – partly because it has a useful weakness for mealworms – easily caught. "They are mealworm addicts," says Professor Doug Armstrong. "I often describe robins as small grey Homer Simpsons who go, 'mmmmmmm meaaalworms'."

Beginning in the early 1990s, Armstrong has worked with robins on Tiritiri Matangi Island, in amongst the scattered remnant bush of Benneydale in the Waikato King Country, and in the forest of Paengaroa not far from Tauranga.

"I often describe robins as small grey Homer Simpsons who go, 'mmmmmmm meaaalworms'."

Once widespread, the robins are now patchily distributed. Being ground feeding and having easily accessible nests, like many native birds they have been easy meat for the usual round-up of introduced predators – possums, stoats, ferrets, weasels and cats – and much of their habitat has gone. But given the right conditions, they can be successfully reintroduced to areas from which they have been lost, and around the North Island many community groups are trying to do just that.

On the face of it, reintroducing a species, such as the robin, to an environment where it was once resident – and where predators are now absent or controlled – seems a simple matter: catch individuals in one place, release in another, and watch the population grow. It isn't necessarily so.

To have some idea of whether a translocation will succeed and the species will persist and prosper, a number of questions must be answered.

They include how many of the translocated individuals will survive the stresses of capture, transport, relocation and release into a foreign environment? How will the inbreeding common in small populations affect the species' fitness? What about the chance of the inadvertent introduction of disease? How does the geography and quality of the habitat affect a species' chances? What about the workings of chance – a hawk that takes several individuals or snowfall that wrecks the undergrowth? What about the source population – will the removal of individuals subject it to risks?

Armstrong's work lets him tackle these questions mathematically, assigning values and probabilities to each factor and enabling him to make longer-term predictions.

The practical upshot: in one instance, Armstrong's models showed that supplementary food could make the difference between success and failure. In another, he determined the level at which robins destined for translocation could be safely harvested from Tiritiri Matangi Island. His work in Benneydale established the importance of stepping stones and corridors between the islands of habitat. (Close to the major forest areas, every patch of forest, no matter how poor, was continuously inhabited. Farther away the best-looking habitat in the study area remained empty.)

Perhaps the most interesting application of Armstrong's work is in guiding the level of predator control that is needed to ensure that mainland populations of threatened species persist. New Zealand's proud record of successful reintroductions is largely attributable to one thing – the

"My dream is that in 10 or 20 years' time, every time anyone does an introduction they have a model in place to make a prediction – or a distribution of predictions reflecting the uncertainties."

successful eradication of exotic mammalian predators. But this only works inside fenced reserves or on offshore islands. For most of mainland New Zealand, predator control is the best that can be hoped for. Armstrong's models have shown that a population of saddlebacks would be unlikely to prove viable if aerial poison drops were used to control mammalian predators, but might be viable if poison bait stations were used instead. And for the 'mainland island' of Paengaroa, where robins were reintroduced in 1999, his model has shown what is likely to happen to the population when various rat tracking rates are recorded. If rats are recorded in more than one-in-five tracking tunnels in a night, the population is likely to decline; as fewer tracks are recorded, so the likelihood of survival and growth increases.

So Armstrong knows a lot about North Island robins – and something about other species such as saddlebacks as well. Yet he is not particularly interested in either species in itself. Robins feature strongly in his research papers because they are "handy generators of data". It is the lessons they offer about the larger issues surrounding the translocation of species that interest him.

New Zealand has a long history of translocations, dating back to the 1890s, when Richard Henry relocated kakapo to the then predator-free Resolution Island nature reserve in Fiordland, through to more recent times and, famously, the work of Don Merton in ensuring the survival of the Chatham Islands black robin. "We have so many brilliant field workers – for practical know-how DoC [the Department of Conservation] is amazing," says Armstrong. But inspired fieldwork only goes so far. Armstrong's ambition is to see good fieldwork matched with accurate modelling, and not just in New Zealand.

"My dream is that in 10 or 20 years' time, every time anyone does an introduction they have a model in place to make a prediction – or a distribution of predictions reflecting the uncertainties. It's not an easy thing to do, but we can certainly do it now for North Island robins."

Hence the recently published book of which Armstrong is the second-named co-author: *Reintroduction Biology: Integrating Science and Management*. (The first-named co-author, John Ewen, was Armstrong's second Master's student, graduating in 1998.)

It is a timely work. In the past decade, the mathematical modelling of species translocations (of which species reintroducion is a subset) has become increasingly popular. One chapter in the book lists 89 recent papers, dealing with species as diverse as panthers in Florida, wild boar in Denmark and Carpentarian rock-rats in Australia.

Armstrong expects that the work will become yet more relevant, particularly as climate-change-driven habitat change is likely to mean relocating some species to save them. The first climate-change-driven instance of 'assisted migration' – moving a conifer called the Florida torreya to cooler climes 650 kilometres north of its natural range – took place in 2008. It is likely to be the first of many.

Reintroduction Biology: Integrating Science and Management
By John G Ewen, Doug P Armstrong, Kevin A Parker, Philip J Seddon
Wiley-Blackwell

Above: British bulldog/cordyline trees, Torquay, England 2011. | Below: Fourteen properties along Dracaena Avenue (cordyline plantings) in Falmouth, England 2011.

Torbay tī Kōuka
A New Zealand Tree in the English Riviera
By Wayne Barrar
University of Plymouth Press

Flirting with the familiar

MIchelle Hollis writes.

Few plants are as emblematically Kiwi as the cabbage tree (tī kōuka). How disconcerting, then, to encounter this New Zealand native renamed, hybridised and embraced as an emblem of southwest England.

Associate Professor Wayne Barrar's photography often explores the relationship between humans and landscapes, culture and nature. His book *Shifting Nature* compiled 10 years of photographic projects that examine how people shape places, from phosphate mining on Nauru to drying salt at Lake Grassmere in Marlborough. More recently, his book and exhibition *An Expanding Subterra* investigated different uses of underground spaces.

Last year, Barrar became the first international artist-researcher to receive a residency from the Research Group for Land/Water and the Visual Arts at Plymouth. The residency was the fruit of a creative collaboration between Massey and Plymouth universities: »»

"We were already building a good relationship, so when the idea for the cabbage tree project come up, it fitted me and them very well," he says. Barrar's photographs first formed an exhibition (McNamara Gallery, Whanganui) and now feature in a book designed by Massey lecturer Anna Brown. (Incidentally, Brown's font choices included 'Feijoa', by New Zealand typographer Kris Sowersby – an allusion to exotic species that have altered New Zealand's domestic landscape.)

As Philip Simpson notes in an essay that prefaces Barrar's book, for those promoting the tourist appeal of the Torquay, Paignton and Brixham area, the robust *Cordyline australis* has obvious appeal: it looks like an inhabitant of the luxuriant tropics but thrives in a less-than-tropical climate.

Cabbage trees, Simpson tells us, were probably first brought to southwest England in the 1820s as seed from Edinburgh: a two-stage migration. Later, "more sturdy cordylines were imported to southern England by John Standish, a nurseryman from Bagshot in Surrey, and a plant provided by him to Kew Gardens created a sensation when it flowered in 1868". Later waves of planting included public efforts to welcome and console New Zealand World War I veterans by installing those spiky symbols of home along streets in Torquay.

Barrar's photographs show cabbage trees used as specimen trees in domestic gardens, clustered on traffic islands (which Barrar describes as "kind of metaphors for tropical islands") and nestled among English seaside tat. "It's an exported landscape, yet some of the images could not possibly be New Zealand," says Barrar.

In fact, many Britons probably have no notion of the cabbage tree's origins – or indeed know it as a cabbage tree. In England, it has come to be known, among other names, as the 'Manx palm', 'Brighton palm', 'Torquay palm' and 'Torbay palm'. Its very identity has been appropriated and colonised.

But the plant too has changed. According to Simpson, people started breeding cordylines in Europe in 1870. Hybridisation has produced cabbage trees better able to endure the British cold as well as "forms and colours suitable for indoor- or boutique-garden culture". Red Start, Sundance, Sunset, Coffee Cream, Razzle Dazzle... the names sound like tropical cocktails. In 2004 a cabbage tree variety called Torbay Dazzler took the Royal Horticultural Society Award of Garden Merit.

The English do different things with their cabbage trees. They prune them – leaving an amputated stump to re-sprout. They plant them in exotic garden layouts such as in an illuminated Italian garden. "It's not gross, just a little unnerving," says Barrar. Even in shots crammed with New Zealand native species, the landscape looks somehow unnatural, and the images explore what Barrar calls "a slight displacement when you focus on things photographically".

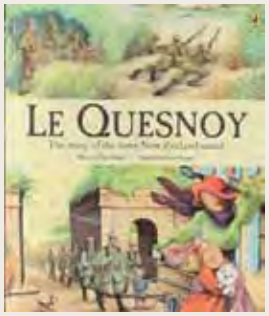
Is there any sign of a backlash against exotic trees amongst the English gardening cognoscenti as there is in New Zealand? The book does include a wry photo of a "patriotic planting" sign, but Barrar does not believe this reflects any widespread preference for native-only gardens. In fact, the 'patriotic' photo was taken at a garden centre surrounded by non-native trees. "The English landscape is so much more globalised and altered than ours," he explains. Perhaps one day New Zealand cabbage trees will fall out of fashion. For now, however, they live jauntily; though whether out of context or wholly at home is in the eyes of the beholder.

To see more of Wayne Barrar's work, including slide shows, visit the definingnz website:

http://definingnz.com/category/wayne-barrar

Gorilla fringed in cordyline, 'crazy golf' course, Torquay, England 2011.

Cordyline (Torbay Dazzlers) in Paignton, England 2011.



Les Quesnoy: The story of the town New Zealand saved
By Gleny Harper, illustrated by Jenny Cooper
Puffin Books

Liberation tale

Redmer Yska writes.

When professor of war studies Glyn Harper is not crafting scholarly military history texts, he writes for children.

"I really enjoy writing for younger audiences. It is never too early for them to learn history," Harper says from his office at the College of Humanities and Social Sciences at Palmerston North.

His latest book for younger audiences, his seventh, is *Les Quesnoy: The story of the town New Zealand saved*. It tells the amazing tale of the small French town captured by Kiwi soldiers in the final days of World War I.

'It's an inspirational story, showing that the actions of New Zealand soldiers in liberating the town on 4 November 1918 really made a difference. The town occupants have never forgotten it," he says.

The book is written from the perspective of a young French girl living in the town. She tells of the hardship of living under German occupation for four years. In the final week of the war, the Kiwi infantry mounts its surprise raid.

Rather than using the destructive power of artillery, the Kiwis daringly scale the town's ancient walls, capturing the occupiers and liberating the town intact.

The townspeople have gone on to name streets and squares after New Zealand places. Individual Kiwis, including Lieutenant Leslie Averill, the first infantryman to scale the wall, are commemorated. There is even a Place des All Blacks and the men in black famously visited the town during their 2008 French tour.

Published by Puffin Books, *Les Quesnoy: The story of the town New Zealand saved* features the stunning illustrations of Jenny Cooper. Describing it as a "beautiful book", Harper enthuses about the stimulation and challenge of writing for younger audiences.

"It forces you to write simply and directly, get to the heart of the story and find things that children can relate to. I trained as a teacher, so have always retained an interest in reaching this readership."

Harper says he came on the story when acting as historical advisor to a 90th anniversary documentary about the events of November 1918, which screened on Anzac Day 2008.

Another major anniversary, the forthcoming centenary of the beginning of World War I is likely to leave Harper with little time to write more children's books. He is the leader of the Centenary History of New Zealand and the First World War project.

'We are planning nine volumes in the series, covering such issues as the home front and the experience of individual soldiers at war from a social history perspective. It is going to be a busy period."

Harper joined the Australian Army in 1988 and after eight years transferred to the New Zealand Army, where he rose to the rank of lieutenant colonel. He was the army's official historian for the deployment to East Timor, which was the subject of his first children's book.

When I blew out the candle

What I want is my own private
Summer of Love. Four-person festival.
Two feral children, heirloom tomatoes
and a corn field. Put down roots and
grow wild. Blossom where we are planted.

We'll hold another car boot sale –
make enough to buy a paddling pool, eat
home-made strawberry slushies,
sluice the baby in the sun-warmed water,
loll on itchy crocheted blankets

and peel each other's sunburn off.

Helen Lehndorf is a Massey creative writing teacher and City Library Events Support Officer. Her first book of poems, *The Comforter*, is available at Bruce McKenzie Booksellers in Palmerston North and online at www.seraphpress.co.nz.

MASSEY UNIVERSITY
TE KUNENGA KI PŪREHUROA
UNIVERSITY OF NEW ZEALAND

A CHANGE IS COMING…

New Zealand's place in the world is changing. A new New Zealand is emerging. New Zealanders are carving out a new future for themselves, they aspire to achieve big things, break new ground and mark out a distinct Kiwi world view.

It is because New Zealand is building a new future that Massey University is so important. Throughout its history Massey has embraced change. It has been at the forefront of new developments in teaching and research that have served New Zealand and the world community.

But serving the community, providing excellence, and being at the forefront of new developments comes at a price; a price which often exceeds diminishing budgets.

To help ensure Massey continues to shape this nation and drive the new New Zealand, Massey has launched its first fundraising campaign, *Advancing New Zealand*. The campaign will raise funds to make certain that research and scholarship at Massey remain first class and that some of the most innovative and creative solutions to global issues are discovered at Massey, by Massey scholars.

TO BE A PART OF THE NEW NEW ZEALAND
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