Among the 2,000 graduands at Spring Graduation last week was Lisa Chant whose PhD in Community Health was the last supervised by Professor Emeritus of Māori Studies, Sir Hugh Kawharu, before he died.

Lisa, a member of the Ngāti Whatua iwi of which Sir Hugh was a Rangitira, set out to study Māori Health experiences as models for co-operative co-existence between indigenous and non-indigenous peoples. She engaged Sir Hugh and Dr Tim Tenbensel from Health Systems at the School of Population Health as her joint supervisors.

“I had done all the hauora Māori fieldwork when Sir Hugh became ill and then I stopped my PhD and helped his family care for him up until his death,” explains Lisa.

In 2007 she picked up her PhD study again which she has fitted in around parenting a disabled child and contract teaching at the University in a number of fields including politics, medical humanities, Māori and indigeneity, media and community health.

Her PhD concluded that small community-led initiatives between indigenous and non-indigenous peoples can become a basis for co-operative co-existence. “Hauora Katahitanga was a study of unity through wellbeing and wellbeing through unity”. Lisa is currently a senior lecturer/Academic Developer for CleaR (Centre for learning and Research in Higher Education) and is studying for a Postgraduate Certificate in Academic Practice.

**SPRING GRADUATION**

Spring Graduation

Some 2,050 graduates received a total of 2,107 qualifications in person at Spring Graduation. These included 120 doctorates. A further 976 qualifications were conferred in absentia, and two posthumously.

Business and Economics was the faculty awarding the most qualifications with 704, followed by Arts (697), and Science (683). There were 269 in Medical and Health Sciences, 249 in Engineering, 243 in Education, 130 in Creative Arts and Industries, and 110 in Law.

Speakers at the ceremonies included Greg Lowe, CEO of the Beca Group; Rhana Devenport, Director of the Auckland Art Gallery; Heather Kean, Director of Human Resources, NZ Milk Products at Fonterra; Shaun Hendy, Industry and Outreach fellow for the Callaghan Innovation and Professor of Computational Physics at MacDiarmid Institute for Advanced Materials and Nanotechnology.
Professor Jim Bade, Head of the School of European Languages and Literatures, was on hand to see his son David graduate with a PhD in Geography at Spring Graduation.

Jim’s other son Richard graduated from Auckland with a conjoint BA, BSc in German and Chemistry three years ago and is now in Europe doing a PhD in Chemistry.

David is a Built Heritage Specialist in the Heritage Policy Team at Auckland Council. His thesis is titled Managing Cultural Heritage in ‘Natural’ Protected Areas: Case Studies of Rangitoto and Motutapu islands in Auckland’s Hauraki Gulf. It stems from his masters, which investigated the heritage landscape of Motuihe Island. “From this research, I detected a favouring of natural heritage of the island to the detriment of its cultural heritage. I thought that this issue deserved some critical attention by way of a PhD thesis. 

“Although I have a strong concern for the welfare of cultural heritage in New Zealand, I am also sympathetic to the protection and restoration of New Zealand’s natural environment. I have been a heritage tour guide on Motuihe and have also planted trees on the island. My PhD research investigated how these two heritage values can co-exist.”

David is currently assisting with the Onehunga Heritage Survey (to determine historic heritage places and areas to be protected) and assisting with the preparation of the heritage section and maps of the Unitary Plan.

Morag Atchison, currently an Artist-Teacher in Voice at the School of Music and vocal consultant to the University of Auckland’s Chamber Choir, graduated with a PhD in Music looking at the soloist as an ensemble singer.

Morag’s doctoral study was driven by her interest in choral music, ensemble repertoire for soloists, and the training of the choral musician in the New Zealand environment. Through the music of five recitals, she explored the role of the soloist in the ensemble, from Bach through to contemporary New Zealand art song.

Morag’s research showed that the skills developed in the ensemble are vital for the solo singer especially as singers entering the professional arena spend a large part of their singing life in the ensemble context. In her doctoral recitals, Morag challenged the belief that an operatically trained singer should not sing as a chorister. Her research gives an historical context to this idea, and identifies a very definite place for the soloist as an ensemble singer in New Zealand.

Interestingly Morag, outside the University, sings with the national chamber choir Voices New Zealand, confirming that a soloist can also be a chorister.

At the same time as graduating with a degree in Commerce and Engineering with first class honours, Isuru Abeykoon Udugama is well into his PhD in Engineering.

His thesis title is “High Purity Distillation Modeling, Optimisation and Control” and the study has him making models of refining columns to look at ways to improve energy efficiency.

“I look to improve energy efficiency with minimal addition of extra equipment,” he says. “Big companies are happy to implement these systems as they save money by spending less energy and without spending a lot of money on equipment.”

When he’s not studying, Isuru helps with the family tea making business, Gemi Teas Colombo (Pvt) Ltd run by his Dad who still lives in Sri Lanka.

“Since I was 14 I’ve done everything from staying late when we load the containers to developing easy-to-use costing sheets, to manning the reception - which was fun,” he says. These days, Isuru works on marketing strategy, international sourcing and finances for Gemi Teas.
From the Vice-Chancellor

The University of Auckland News

As those of us who remember running to the library for the latest issue of a journal or mailing off article reprints to scholars around the world will appreciate, scholarly communication has undergone a remarkable transformation over the last decade. Electronic journals and books, search tools from Amazon to Google Scholar, and repositories of digital content from PapersPast to JSTOR have changed how academics do their work.

Meanwhile at home, the growth of the e-book market and online retail has led publishers like HarperCollins, Hachette and Pearson to reduce their New Zealand presence.

Our own Auckland University Press has grappled with these changes by adopting an innovative strategy. First, the Press has expanded its remit from the humanities to take on important work in science, business and medicine – books like Professor Ron Palenski’s *The Good Doctor* or *Changing Gears* by Professor Darl Kolb and the ICEHOUSE team. Second, enlarging its subject focus has enabled the Press to increase international partnerships - selling rights in five languages and territories to Professor Michael Corballis’s *Pieces of Mind*, and working with Yale University Press on co-editions of Veronika Meduna’s *Science on Ice* and the photographic guide *Birds of New Zealand*. Third, with the help of a Vice-Chancellor’s Strategic Development Fund grant, the Press has engaged in an ambitious digital project – turning 250 backlist titles into e-books and the Birds guide into an app, both of which will be rolled out in the next few weeks.

Throughout that transformation, the Press has never lost sight of quality. That is evident at the New Zealand book awards – Auckland University Press has had more finalists than any other publisher for the last five years and success again this year with Anne Kennedy’s *The Darling North* taking out the poetry award and Jarrod Gilbert’s *Patched: The History of Gangs in New Zealand* winning the People’s Choice. Another of its books is also very much talked about at present - *Get off the Grass: Kickstarting New Zealand’s Innovation Economy* by Professors Shaun Hendy and the late Paul Callaghan.

As the world of scholarly communication continues to evolve rapidly, it is very pleasing to see the Auckland University Press adapting so well.

Newmarket update

The University’s Newmarket Campus site was enhanced recently with the addition of art. Thirteen students from Elam School of Fine Arts have created a temporary mural that enlivens the existing fencing on the corner of Park Road and Khyber Pass.

Initiated by Property Services in association with Head of School, Associate Professor Derrick Cherrie and coordinated by Graduate Teaching Assistant Toby Raine, the project was self-directed, with an open brief, encouraging the third-year students to create individual works and develop their own style as artists.

The murals, which took six weeks to complete, were installed on 13 of September, and will remain in place at the entrance of the former Lion Breweries site while demolition and construction work takes place.

Within the site contractors are now hard at work refurbishing the existing warehouses, whilst demolition of the remaining Lion buildings continues.

Art History student Katy Bond could not graduate in person as she had already left for Cambridge University in the United Kingdom to study for a PhD into 16th century costume design.

Katy won a prestigious Cambridge Commonwealth Trust Prince of Wales Scholarship to study how civic and national identities were shaped by the quality and style of clothing people wore.

Her PhD continues the topic of her first class masters thesis titled: “Dressing Kinship and Allegiance in Sixteenth-century European costume books.”

“I am just absolutely thrilled,” she says of the scholarship. “You really don’t expect it to happen to you, you just apply because you’ve got to be in it to win it.”

Katy credits her success to the support of the Art History Department and HOD Erin Griffey.

“At post-graduate level the Art History Department at Auckland allowed me the freedom and opportunity to explore themes of dress in art. They provided fabulous resources and support without which I could never have come this far.”

She will be resident in Newnham College and study in the history department in St Johns College under the supervision of historian Dr Ulanka Rublack, author of one of Katy’s favourite books; *Dressing Up: Cultural Identity in Renaissance Europe*.

16th Century costume design
**Staff News**

**Dean returns to Auckland**

The new Dean of the Faculty of Engineering, Professor Nicolas (Nic) Smith returns from appointments in Oxford and London to continue a long association with the University of Auckland.

Nic is well known to many in the Faculty of Engineering and the wider University. He holds a Bachelor of Engineering with First Class Honours and a PhD, both in Engineering Science, from the University of Auckland (interspersed by three years as a design engineer at Fisher and Paykel). Following a postdoctoral fellowship at Oxford, Nic returned to the University as an academic in Engineering Science. He returned to Oxford in 2006 and was awarded the Chair in Computational Physiology there in 2008.

In 2010 he was recruited to lead the formation of a new Biomedical Engineering department at King’s College London. Nic has an international reputation in computational modelling of human body systems, particularly the cardiovascular system.

“Engineering is an evolving discipline that requires creativity as we redefine and exploit opportunities that these changes bring. It is critical we look beyond the service technologies and develop new skills and ways of contributing,” he says.

“My vision for the faculty is enabling our community through teaching and learning to tackle the problems of not just the 21st century, but beyond that too. It is also our ability to distil the important issues and tackle the kind of issues that technology is already producing to improve the quality of life for New Zealanders, and for the world as a whole,” says Nic.

“We’re going to do that by being at the interface between core science and the communities where those technologies get applied to make a difference. My vision for engineering is very much the process of deploying scientific rigour with an acknowledgement of the human context benefit potential”, he says.

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**Scholarly exchange**

One of our own brilliant scholars, Distinguished Professor Dame Anne Salmond from Māori Studies, has been awarded an outgoing Hood Fellowship to conduct research for her new book, *Tears of Rangi: Experiments between Worlds*, on the history of ontological exchanges between Maori and Europeans from 1769 to the present.

Among the internationally renowned academics who will be visiting the University with the assistance of Hood Fellowships is Distinguished Professor Daniel Shechtman, Philip Tobias Professor of Materials Science at Technion - Israel Institute of Technology in Haifa, who will visit the University’s School of Chemical Sciences. Professor Schectman was awarded a Nobel Prize in Chemistry for 2011 for the discovery of quasicrystal. Quasicrystals (or quasiperiodic crystals) are crystals with regular patterns that never repeat themselves, something considered impossible in chemistry of solid matter before Daniel’s discovery.

See the list of other outgoing Hood Fellows on the staff intranet.

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**Heart failure research wins award**

A presentation on the structure and function relationship in heart failure by Alexander Wilson has won the Auckland Bioengineering Institute’s John Carman prize.

The annual prize is awarded for the best oral presentation by a graduate student at the New Zealand Medical Sciences Congress (held in Queenstown each year), for biomedical engineering, computational physiology and/or biophysics. The prize honours lifetime achievements of the late Emeritus Professor John Carman, founding Professor of Anatomy at the School of Medicine, where he was head of department for more than 30 years. He was one of the first people at the University to believe the use of numbers would enhance medical knowledge.

Alexander is enrolled in the first year of his PhD studies, using computer modelling to better understand heart failure. His PhD supervisors are Associate Professor Ian Le Grice from Physiology and Professor Martyn Nash from the ABI.

“In my PhD project the outcome we are seeking is to provide insight that will lead to effective treatment of diastolic heart failure. Currently there is no effective treatment.”

Most of the work so far is using small animal MRIs to investigate a rat model of heart failure. “I’m looking at what are the important aspects of the changes in the heart structure in different types of heart failure.”

“I’m examining total collagen and heart mass, and if it is a combination of these or a subset of these that causes heart failure,” he says. “By making these models we can test each component of heart failure, such as how stiff the heart wall is or how the ventricles are affected by heart failure.”

Alexander has a BSc degree in biomedical science that he followed with a Post-graduate Diploma in Science (specialising in medical science) and a Masters of Operations Research (first class honours) from Engineering Science.
“We live in a glorious literary landscape, here in New Zealand”, declared Paula Green. “One where the concept of ‘home’ is what matters most, yet we are shifted and shaped by the wider world and those that have come before us.”

Paula, a poet, literary critic and alumna with a doctorate in Italian literature, took part in the Poetry in Focus salon panel chaired by paediatrician and poet Renee Liang in mid-July and then chaired the Fiction in Focus salon panel on 21 August.

The Salon Series, a modern take on the old seventeenth century French literary salons, has been introduced by Alumni Relations and the University of Auckland Society this semester with three separate sessions exploring poetry, fiction and media in New Zealand.

About 40 alumni, staff and invited guests have braved two cold, wet winter evenings to attend the first two salons featuring some of our finest alumni poets and fiction writers. CK Stead and Grace Taylor accompanied Paula Green on the poets’ panel in July. The lively all-female fiction writers’ panel in August featured Charlotte Grimshaw, Sarah Laing and Stephanie Johnson. Both panels were unanimous when it came to poetry and fiction writing in New Zealand.

“We have so much to affirm in New Zealand writing right across the board”, said CK Stead. “Although poetry comes second in the commercial world where it is not seen as having commercial value it’s ‘a very hardy weed’ and is flourishing in the non-publishing world.”

When asked to consider what makes a poem good or bad, Paula Green gave a suitably poetic answer, “a good poem elicits a visceral response. It has a physical and emotional effect as well as intellectual, whereas a bad poem just” sits like a flat pudde fast asleep”.

Health Research Council: Explorer Grants.
These provide seed funding in any health research discipline for transformative research ideas at an early stage, before an application for greater investment through standard funding mechanisms. The proposal must advance ideas considered to be transformative, innovative, exploratory or non-conventional, and have potential for major impact. An impact on knowledge is valid, and the idea doesn’t have to be immediately applicable in terms of a health outcome. Three grants worth $150,000 each are available for research working expenses (which may include salary for casual staff), for a term of up to 24 months. Deadline in the University’s Research Funding Module and the HRC portal is 12 noon Friday 25 October 2013, contact Hilary Lapsley h.lapsley@auckland.ac.nz, ext 83562.

Neurological Foundation (NF): Travel Grants.
For NF Principal and Associate Investigators and other researchers who have made a significant contribution to a NF funded research project, from initiation, to presenting results. Information and application forms can be found at www.neurological.org.nz. Deadline in the University’s Research Funding Module is Friday 25 October 2013, contact Lorraine Scott lo.scott@auckland.ac.nz, ext 88652.

The University of Auckland Foundation: Seelye Fellowships.
The Ralph and Eve Seelye Charitable Trust Fund provides for Visiting Fellowships in any faculty or Large Scale Research Institute of the University. These awards aim to attract outstanding overseas and local academics and other leading international authorities to Auckland to work with colleagues in the University and to present public lectures and seminars. Grants are in the range of $10,000 to $20,000 and are to be used to cover accommodation, general and travel expenses. Deadline in the University’s Research Funding Module is Friday 1 November 2013, contact Pramilla DaSilva pc.dasilva@auckland.ac.nz, ext 88113.

New Zealand Optometric Vision Research Foundation.
Research Grants providing funding for research and vision care projects in Optometry and Visual Science. Information and application forms can be found at www.nzovrf.org.nz. Deadline in the University’s Research Funding Module is Friday 22 November 2013, contact Julia Zhu: julia.zhu@auckland.ac.nz, ext 83986.

Our “glorious literary landscape”

And what makes good fiction? “A page-turning read written in terrific stylistic prose,” said Charlotte Grimshaw. For Stephanie Johnson it is the shock of the new - “something you’ve never read or thought of before”, and for Sarah Laing it’s about “being able to inhabit other people’s lives”.

The final Society Salon, Media in Focus: How the news is made, featuring David Hastings, Dr Gavin Ellis and Jon Stephenson with Professor Annie Goldson as chair will be held on the more summery evening of 6 November at Old Government House. Staff, Alumni and friends are all welcome to attend.

Here Now: Re-imagining New Lynn

As part of the Auckland-wide Heritage Festival, The University of Auckland’s School of Architecture and Planning and Auckland Council are collaborating on the event Here Now: Re-imagining New Lynn.

120 architecture students will design and fabricate installations for the centre of New Lynn, which recall the suburb’s rich cultural, social and industrial heritage as well as imagine its future.

Over four days visitors are encouraged to take the train to New Lynn, collect a map from the station and explore the imaginative, large-scale installations from Totara Avenue to the Titirangi Road intersection.

Here-now opens at 6pm on Thursday 10 October with the wonderful New Lynn night markets and runs through to Sunday 13 October. Make sure you check it out.

www.auckland.ac.nz/herenow
From the art collection

When artist James Speers was commissioned to make a work for the new Kate Edger Information Commons, he created two long light boxes, which when illuminated produce interrelating fields of colour.

Connoting the visual effects of stage lighting in theatre which is often keyed to actors and events, “Indian Concert” floats horizontal and vertical rectangles of primary and secondary colours – green, red and yellow – on a salmon pink background. Operating like a colour field painting, the effect is immersive, saturating the surrounding area of wall and carpet with a warm pink glow. Basic colour theory governs the placement of the rectangles, and the behaviour of each hue in the optic mix. Green, a cooler colour made up of yellow and blue, recedes visually, and is the natural complement to red, so the juxtaposition enhances the brightness of each colour in the viewer’s perception. The warmer golden yellow advances visually, rather than seeming to just be flat layers, the work appears to change in relation to the available light, and its colour planes float in depth.

The highly machined finish means that the technical fabrication of the work remains hidden and mysterious. Each light box comprises three components – an external acrylic enclosure which extends beyond the wall face and is connected to the welded aluminium frame behind the wall. A formalist, Jim intended that the work would produce “a diffuse and faceted light effect” beyond the confines of its positioning, which was originally to have been on two walls that were at right angles. However, as construction proceeded, the space was circumscribed, and the site became a continuous flat surface opposite the parenting room on the second floor of the new building. As hoped, light is cast onto and off the surrounding surfaces, creating the “Indian Concert” effect of the work’s title, where colour operates like sound, bouncing around off its enclosing chamber, and creating echoes and chimes. By colouring the light, Jim makes visible the fact that it travels in waves, like sound, and draws attention to the physical properties of the hues. “Indian Concert” is a demonstration that shows how our perception of colour itself depends on how an object interrelates with its environment. The zones of light created respond differently to the available ambient light, and the work has been planned to offer different experiences to the viewer as s/he moves past it. This foregrounds the science of optics and the importance of how the eye and brain perceive colour. Objects are coloured by the light leaving their surfaces, depending on how reflective the surface of the object is, and how much incidental light is around, as well as the angle of viewing. “Indian Concert” is busy not only reflecting light, but also transmitting light itself. As well as cheering up the architecture with its bright glow, it is a demonstration of how a viewer’s perception of an object’s colour depends not only on the spectrum of the light leaving its surface, but also on a host of contextual cues.

Linda Tyler

James Speers, Indian Concert, 2002, vinyl, acrylic and fluorescent light in two parts each 3000x1700x400mm

Antarctic Adventure

Barry Waterhouse, a former University Geology lecturer and retired New Zealand Geological Survey geologist, has written this account (with help from his niece Susan Nemec) of three geological expeditions he made to Antarctica and the Southern Ocean. These included the Robert Scott Glacier geological mapping expedition led by Rudi Katz in the summer of 1969-70, the Skelton-Koettlitz Glaciers expedition led by David Skinner in the summer of 1975-76, and an expedition by USSS Glacier in 1965 from McMurdo Sound back to New Zealand.

“I read this book in one evening,” wrote Bruce Hayward in a review for the GSNZ Newsletter. “…Whether you have been on one of these Antarctic expeditions or not, there is a lot in this book that geologists will find of historic interest or to reminisce over.” The book includes 31 black and white photos taken by Barry that help bring the stories to life.

Available from Susan Nemec. $25. Email: nemecedgear@clear.net.nz
SATURDAY 5 OCTOBER
Exhibition event
Women, pornography and sex. 1pm, Gus Fisher Gallery, 74 Shortland St. With Emna Lyon (owner/director of Dvice) and George Parker (Women’s Health Action and UOA).
Feminists have hotly debated pornography, disagreeing over whether it contributes to the sexual oppression or the sexual liberation of Nicola Gavey invites today’s panelists to discuss their views on these issues, look at how this debate holds up today, and whether the usual association of ‘sex positive’ with ‘pro pornography’ makes sense any more. Queries to gusfishergallery@auckland.ac.nz

SUNDAY 6 OCTOBER
DMC recital concert
Abigail Spierling: Transpacific travels: Beethoven to Farr. 6pm, Music Theatre, School of Music. Queries to concerts@auckland.ac.nz

MONDAY 7 OCTOBER
World Habitat Day
The University will be observing World Habitat Day to celebrate our unique partnership with UN-Habitat. The annual WHD photography competition encourages us to think about the state of urban settlements at home and around the world. Entries are now open. Visit www.facebook.com/ua.whd for more information.

TUESDAY 8 OCTOBER
DALSR/Asian studies seminar
Dr Harumi Minagawa, UaA: Subemergence of lexically encoded egocentricity in syntax: The subjective emotion predicates in Japanese. 4pm, Pat Hanan Rm 501.
Doctoral Information Evening 4.306.30pm, Upstairs, A Block (20A1a), Epsom Campus, 74 Epsom Ave, Epsom. Parking is available at Gate 2, 76 Epsom Ave. Register at https://doctoralinfoevening.eventbrite.co.nz
Inaugural Lecture
Professor Alan France, Sociology: A political ecology of youth: towards a theory of ‘structured agency’ in explaining youth identities. 6pm, Lecture Theatre B10, Library Bldg.

WEDNESDAY 9 OCTOBER
Fermata seminar
Peter Watts: ‘I hate music...but I like to sing’, Bernstein, Five Kod Songs (1943): Aspects of motivation in music-making. 5.30pm, Music Theatre, School of Music, 6 Symonds St.

THURSDAY 10 OCTOBER
Inaugural Lecture
Richard Wolfe, Associate Emeritus, Chemistry: Be a world citizen. 4.15pm, Pat Hanan Rm 501.

FRIDAY 11 OCTOBER
School of Music lunchtime concert
Chamber music ensembles. 1.05pm, Music Theatre, School of Music, 6 Symonds St. A series of lunchtime concerts showcasing School of Music students in both individual and ensemble settings. Free. Queries to concerts@auckland.ac.nz

SATURDAY 12 OCTOBER
Exhibition event
A rear view: Reflecting on art and change. 1pm, Gus Fisher Gallery, 74 Shortland St. With Nicola Gavey, Linda Tyler, Virginia Brum. This panel discussion concludes the A Different View exhibition and associated public programme, with the research investigators reflecting on the relationship between art, ways of seeing and social change. Queries to gusfishergallery@auckland.ac.nz

MONDAY 14 OCTOBER
Computer Science seminar
Dave Crocker, Brandenburg InternetWorking: Email evolution: 40 years of changing engines in mid-flight. 12noon, Room 303-561, City Campus.

TUESDAY 15 OCTOBER
Inaugural Lecture
Philippa Poole, FMHS: Creating a medical workforce for NZ in 2030: one doctor at a time. 5.60pm, Lecture Theatre 007, Bldg 505, Grafton Campus.

WEDNESDAY 16 OCTOBER
Art History seminar
Richard Wolfe, Associate Emeritus, Auckland War Memorial Museum: Oceanic and the museum: Representing the material cultures of the Pacific. 1.20pm, Pat Hanan Rm 501.

Classifieds

Accommodation available
Apartments for rent. Call us for your rental requirements; we offer city apartments furnished/unfurnished, all sizes and prices; great rental deals for longer-term leases; call David Feng (09) 303 0601 or (021) 246 6710 at City Sales or rentals@citysales.co.nz or log on at www.citysales.co.nz/rentals

Waitehe cottage, quiet location near bus stop. Weekend or longer getaways. Suit couple or up to 4. Minimum two nights. Reasonable rental. Christmas and dates in school holidays still available. Photos and further information available on request. Contact aldl5@aol.com or (021) 136 1759.

MISCELLANEOUS
City Legal Services. Rainey Collins Wright is a small law firm centrally located at L1 Princes Court, 2 Princes Street. We are near the University, with good parking. We assist with property transactions, trusts, wills administration of estates, enduring powers of attorney and relationship property matters. Please phone our senior solicitor Nichola Christie on 379 5828 to discuss your needs, or email nchristol@rainey.co.nz

Travel. I have 12 years experience in booking all aspects of personal travel for university staff and lecturers. I pride myself in ensuring that your travel plans are sourced at the lowest possible costs and are tailored-made to your requirements. Contact Karen on karen.embleton@monotrail.co.nz or (09) 406 0064 (wk) or (021) 188 7781.
SAVING OUR SNAPPER FISHERY

Throughout much of the north-eastern coast of New Zealand our kelp forests have vanished. They have been mowed down by hordes of hungry sea urchins or kina, which are no longer kept in check by their arch enemies - large snapper and crayfish. The barren kina wastelands are around 75 times less productive than the lush kelp forests they have replaced. The massively productive coastal kelp forests are vitally important for supporting a myriad of creatures, especially a rich diversity of fishes and shellfish, many of them important to our fisheries. Unfortunately, a great deal of this kelp productivity on our north-eastern coasts has disappeared along with our largest snapper and crayfish.

Mussel beds once carpeted the seafloor of the Hauraki Gulf over a total area larger than Wellington City. These mussels pulled nutrients out of the water column and made them available to the rich variety of animals living amongst the mussels, especially baby fishes, such as snapper. Last century these mussel beds were almost entirely fished out due to poor fishing controls. The mussel beds have failed to recover and this vast nursery area for fishes has now been lost.

Other vital nursery habitats for juvenile fishes have also been destroyed, such as the vast areas of sea grass beds which were wiped out in the Whangarei Harbour by the 1960s due to sediment discharges from land. Baby snapper love hiding in sea grass and feeding on the rich food sources this unusual plant provides.

Seabed dredging and some types of bottom trawling for fish, have also been shown to remove the structure and diversity of the seabed, by knocking over sea sponges and breaking up horse mussels which poke up into the water column. These seabed features are vitally important nursery habitats for juvenile snapper.

A great deal of our coastal environment is open to these kinds of seabed changing activities, managed through fisheries controls.

Marine species such as snapper maintain a high degree of genetic diversity throughout their large populations in order to help them adjust to environmental changes such as loss of nursery habitats and climate change. However, when fish stocks are heavily fished this important genetic reservoir is eroded. Recent research has shown this to be the case for snapper populations in New Zealand. Scientists have advised that maintaining adequate size of fish populations in these situations is an important management consideration.

Despite this extensive profile of environmental concerns for improving the management of our most valuable coastal fishery, the Ministry of Primary Industries recently released a discussion document for our largest snapper fishery that largely overlooks this. Instead it concentrates almost solely on who should get what share of the fish and does not even mention the environmental performance of the snapper fishery.

This is remarkable because in 2009 the Minister of Fisheries made a major commitment to maximise the benefits from our fisheries but with careful regard to the environmental limits. This was the foundation for the excellent Fisheries 2030 policy which promised to maintain our world-leading track record in fisheries management by better managing fish stocks within the context of the environment on which they rely.

A major promise of the policy was to deliver environment outcomes by ensuring “the capacity and integrity of the aquatic environment, habitats and species are sustained at levels that provide for current and future use. This means - Biodiversity and the function of ecological systems, including trophic linkages, are conserved - Habitats of special significance to fisheries are protected - Adverse effects on protected species are reduced or avoided - Impacts, including cumulative impacts, of activities on land, air or water on aquatic ecosystems are addressed.”

It is critical that going forward the public discussion on our snapper fishery should not just be about how to divvy up the existing fish, but also about how we best manage our environment to protect our fish into the future.

A great deal of research by the University of Auckland is focused on improving our understanding of how we can better manage marine organisms within their environment. Our snapper-related research has shown how important large snapper are for maintaining kelp habitats; how key habitats, like sea grass and horse mussel beds, are critical as nurseries for snapper; and how the reproduction of snapper living within marine reserves can help restock snapper on surrounding coasts.

It is not only about learning more, but taking positive action is also important. For example, University students and scientists are working with a community group and members of the mussel farming industry to restore mussel beds in the Hauraki Gulf, in an attempt to get back the fish nurseries they once provided.

See revievourgulf.org.nz

Professor Andrew Jeffs
Institute of Marine Science