Passionate about a rich life

It isn’t often you hear a priest say, “I’m an Anglican priest and I don’t know whether there’s a god. But I know I’m passionate about that search.”

Then, it isn’t often a speaker delivers an address which is honest in a personal and passionate way, a way to which a diverse audience, ranging in age from mid teens to early nineties, can so easily relate. The Reverend Nic Frances MBE did just that when he presented this year’s Human Rights and Social Justice Lecture at the Callaghan campus in mid-September.

The former Australian Executive Director of the Brotherhood of St Laurence (1999 - 2002) has sought new ways of assisting the marginalized and unemployed, believing that people need opportunity to break long-term unemployment and poverty, not charity. “We need to create the opportunity for us to be all that we can be.”

In his lecture, the Rev Frances explained his dismay at what society values as ‘wealthy’ citing five days he spent with Noel Pearson on traditional Aboriginal land in far north Queensland as demonstrating the true meaning of ‘rich’. “Material possessions weren’t important—it was life being lived to its full, and being enjoyed. Those people were, in my mind, rich.”

“In our lives today we all strive for something which is completely unsustainable. We live in a gated community—where we feel safe. We measure our success by the type of car we drive, which school our children go to. We want the rest of the world controlled as long as that control doesn’t apply to us. Yes, we want road rules as long as they don’t apply to us—I always speed but that’s okay because I’m always careful.”

“We are very small minded and we don’t do causes in this society because we don’t have the time.”

“In attempting to ‘help’ the poor, we are trying to make them just like us—lonely.”

Nic Frances’ work focuses on creating real and meaningful work for people and questions the system of welfare and charity as keeping people poor rather than offering them opportunities. He calls this social entrepreneurship. “We all have to be able to play a valuable role which is more than just a job, and society must value that role.”

“We have to change the political agenda. Every election politicians argue for something which is completely unsustainable. We live in a gated family and first worked in the corporate world before taking up the challenge to create work opportunities for people caught in long-term unemployment. He established two social businesses: the ‘Furniture Resource Centre’ and ‘CREATE’, which were recognised as leading the social enterprise agenda. The British Government awarded him an MBE for his work.

Under his leadership, the Brotherhood of St Laurence worked for an Australia free from poverty by creating innovative ‘whole of society’ partnerships across traditional boundaries. Those included initiatives in job creation for long-term unemployed people, microcredit for people on low incomes, a cross-sector strategy on affordable housing, and support for Indigenous programs.

The Rev Nic Frances was ordained an Anglican priest in 1996 and is currently Associate Priest at St Stephen’s Richmond (Victoria). He is also the founding director of ‘easybeinggreen’—a social and environmental organisation with a vision to have 70 percent of Australian households using a minimum of 30 percent less energy and water by 2014.

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In partnership with our communities

The University's statement of mission and values emphasizes the importance that we place on contributing to regional development and prosperity.

Across the higher education sector, our University is seen as a leader in community engagement. We can point to many examples of successful community partnerships over the last decade. Indeed, in their 2008 Compendium of Good Practice, University of Newcastle contributed to regional development and employment, education and standards of innovation in the field of Indigenous medical education and training.

Increasing the numbers of Indigenous health professionals was the focus of Insights and Innovations: Selecting and Recruiting Indigenous medical, nursing and allied health students, a national workshop hosted by the University of Newcastle during October.

The workshop coincided with the University’s celebrations for the Newcastle examples chosen by Garlick and Pryor illustrate the breadth of our community activities and highlight the many ways that universities can contribute to their region; cultural development through the Conservatorium; promotion and support of schools through the Science and Engineering Challenge; improved health through research conducted by the Hunter Medical Research Institute; support of our students through engagement with our Indigenous communities; service provision through the University of Newcastle's Legal Centre; leadership in sustainable development through our campus activities; and support of disadvantaged groups through the activities of the Family Action Centre.

We have much of which to be proud in this arena. There has been renewed discussion and debate across the sector in recent months about the engagement of universities with their local communities and regions. Part of this debate has been sparked by Minister Nelson's paper Building University Diversity, which explores the nature of universities in today’s Australia. While much of the discussion in response to this paper has been focused on teaching and research, the innovative Research Universities Australia group argued strongly in its submission for the inclusion of community engagement as a key defining characteristic of institutions wishing to call themselves a "university". Another element that is encouraging re-examination of the role of universities in the community is the prospect of additional funding being provided by the Commonwealth for this purpose. In the

This project, known as "Third Stream" funding (ie, additional to teaching/learning and research streams), was introduced to encourage linkage between universities and industry and business in the UK, this funding now supports knowledge transfer through a wide range of community activities.

A recent conference sponsored by the Australian Universities Quality Agency had community engagement as its theme. The keynote address by Dr Barbara Holland from Queensland University of Technology and Dr Holland emphasised that the Engaged University applies itself to "community development, societal needs and opportunities, civic and democratic capacity, and quality of community life", in addition to the traditional university contributions to "economic development, innovation and technology transfer, and individual opportunity."

The recent visit to Newcastle by Professor Ian Marcovy from the University of Pennsylvania provided the opportunity for our staff and civic and community leaders to hear how his institution contributes to the development of West Philadelphia through its teaching and research activities. Over two thousand undergraduates and postgraduate students undertake courses and research projects that are embedded in their community and directly address community needs. A small but important example of such an activity in Newcastle is the support provided by the Centre of Full Employment and Equity (CoFFE), led by Professor Bill Mitchell, to the New Zealand Mayor’s Taskforce for Jobs, an extensive network of local Councils committed to eliminating youth unemployment in their communities.

Following a recent meeting in Newcastle between Hunter Mayors and members of the New Zealand Taskforce in June, the Hunter Taskforce has been established which will be supported by research undertaken by CoFFE.

Although our University has a strong track record in community partnership, Dr Holland's 'checklist of indicators' of engagement show that we have much room for further development. In particular, we need to develop an institutional approach to community engagement that is generalisable and goes beyond the small sum total of bilateral arrangements, even though each of these is important in its own right.

How will we do this?

We need discussion at Academic Senate and a framework developed for the integration of teaching and research activities with the communities we serve. Not all activities in Newcastle are community-based and it is important that we set out the criteria and strategy for community-based activities.

This is an important challenge which we can rise to together with our communities.

Nicholas Saunders
Vice-Chancellor and President
New nursing laboratory for Port Macquarie

The partnership between TAFE NSW- North Coast Institute and the University of Newcastle has taken another major step forward with the launching of the new nursing clinical laboratory at Port Macquarie campus on 5 September. The new laboratory provides nursing students with a simulated acute-care healthcare environment.

"This new clinical nursing laboratory complements the existing Aga Care clinical laboratory", says Neil Black, Institute Director for the North Coast Institute. Mr Black confirmed that as owner of the building, TAFE NSW-North Coast Institute was able to refurbish the room and fit it out to ensure a first-class simulated learning environment.

Visa-Cho, Dean of the University, Professor Nick Saunders, said that he was delighted to take the partnership to this new level. "Through assisting with the purchase of the major equipment for the laboratory, the University of Newcastle has demonstrated its ongoing commitment to building its presence in the Hastings,"

"The laboratory emulates a ward in a Health Campus in its configuration, including a nursing station," says Sharen Marshalls, Head Teacher, Nursing at Port Macquarie Campus.

"It helps any nurses who have been previously trained in a hospital environment to do a conversion course more easily."

Research funding

The University of Newcastle has just been awarded $5.7 million in the latest round of the National Health and Medical Research Council (NHMRC) grants.

Eight teams of researchers have been awarded funding for projects, and three researchers have been awarded fellowships to continue to work and research at the University of Newcastle.

Deputy Vice-Chancellor (Research) Professor Adrian Page said the University of Newcastle had outstanding success in obtaining research funding from the NHMRC and this year is no different.

"This is a pleasing result for the University and strengthens our national and international reputation as a research intensive university. Our researchers rank among the world's best and these grants will extend the vital importance we are doing in health and medical research."

NHMRC Grants awarded to research teams over three years:

- Professor John Forbes $861,188 for the follow-up of the IBIS (International Breast Intervention Study), a prevention trial for high risk women. (This grant awarded over five years.)
- Professor Brian Kelly $177,770 for research into mental health and wellbeing in rural and remote NSW. (This research was one of four NSW research projects highlighted by the NHMRC at the funding announcement. It will look at how factors, such as the drought and access to health and other services, impact on mental health in rural areas.)
- Professor Mike Startup $560,475 for research into the effectiveness of cognitive behaviour therapy for young people at risk of serious mental disorders.
- Associate Professor Robert Calleleet $423,550 for research into the understanding of how the brain can alter pain responses in the spinal cord. (This grant awarded over five years.)
- Associate Professor Kenneth Hough $420,625 for research into innate immunity and Chlamydia infection. (This grant awarded over five years.)
- Dr Phil Haslam $342,838 for the investigation of infection induced asthma. (This grant awarded over six years.)
- Associate Professor John Aitken $232,500 for analysis of the causes of male infertility. (This grant awarded over three years.)
- Professor Leonie Ashman $362,250 for research into the investigation of offenders. (This grant awarded over five years.)
- Professor David Povey $372,500 for research into the investigation of offenders. (This grant awarded over five years.)

People often wonder if opportunities in life are predestined. The opportunity for Aude Loisier to continue her study at the University of Ourimbah campus seems too much of a coincidence to doubt the theory.

Aude's interest in the biodiversity of marine environments has brought her all the way from France to study at Ourimbah. She originally came to Ourimbah 12 months ago as an exchange student for six months and during that time worked on a project with Dr William Gladsome. Not only did it fit perfectly with her previous academic work, it captured her interest so much that she decided to return to undertake a Master of Science. Naturally her supervisor is Dr Gladsome.

Aude's research involves a study of the ways protected marine areas are selected. Aude explains that protected marine areas are those areas of the coast and sea where people's activities are managed to be ecologically sustainable. She says however, that these areas are traditionally selected following a long period of field surveys that document the marine biodiversity of the coast and identify the most important areas of interest - a serendipitous meeting of the coast and sea where people's activities can be very costly and can take a long time.

Aude says, "I am investigating whether it is possible to use a rapid survey method which is more time and cost effective in place of the exhaustive, long term studies that are currently done. My method is to study the biodiversity of a marine wide transect from the lowest point of the shore to the highest point. I can complete that in two hours."

"I then follow this with a very detailed assessment of the same rock platform that takes several days to compare each method.""The second part of Aude's research is an investigation of whether the environmental complexity of rock platforms can be used as an indicator of their importance in terms of biodiversity. She will measure on each rock platform the slope, rock type, number of habitats and boulder sizes."

"These features can be easily recorded from aerial photos and satellite images and if it turns out that these features predict the biodiversity of rock platforms, then they can be substituted for the exhaustive surveys.

"If the rapid method works, it will not only save time and money, it will help to conserve biodiversity efficiently and also conserve the correct sites.

A lot of sites today are protected without considering the areas around them.

"This also involves studying biodiversity conservation at the ecosystem level, concentrating on the relationship between the species. Marine species depend on another in myriad ways and if the ecosystem is upset there can be effects such as competition for food or dominance of one species for food or space," she adds.

Aude is not sure whether she will stay in Australia when her studies are completed or return to France to work in protected marine areas there.

"Australia has such wonderful opportunities to work in the field that I would like to stay here to gain more experience."

"I am very fortunate to have met Bill (Dr Gladsome) during my first visit here. His guidance and experience matched exactly with my interest - a serendipitous meeting.

About Aude

Aude's interest in marine studies started during her early years when she lived for two years in New Caledonia. She says that swimming and snorkelling in that idyllic environment sparked an ongoing fascination with the ocean.

She completed her undergraduate degree in France at Orleans and La Rochelle Universities and completed her masters 4th year project work in Australia.

She believes that the ocean is a fragile environment and where people have thought that it is a world without any limit - taking fish and bounty from it - it needs to be understood and preserved for future generations. Education is the key, she says. "We need to understand it and pass on our knowledge to future generations," she says.
Our beautiful bushland campuses are internationally renowned and are testa to a sustainable environment but, more than just making a ‘cosmetic’ differ research and teaching are making a true difference to the future of our plan.

Great places to work and study

Far from the mud and mosquitoes the campus was renowned for in the sixties, today the 140 hectare Callaghan campus is an outstanding example of environmental management. Initially the site earmarked for the new campus, according to Don Wright (Looking Back: A History of the University of Newcastle, 1992), was not inviting.

“In the raw, its most notable features were lantana and mosquitoes and both were thick to the point of impenetrability... Those who moved in shortly before Christmas 1965 were unlucky to do it in unusually wet conditions which created a sea of mud... Mosquitoes caused building work to stop for a while in January 1965... The contractor provided repellent in gallon containers and the City Council lent its spraying equipment. The RAAF had to be called in...”

Those difficulties aside, since the commencement of building on the site, great care has been exercised to maintain the mature eucalypt tree cover as the dominant landscape feature. A significant tract of remnant bushland including creeks and wetlands has been dedicated in the University Master Plan as ‘Nature Reserve’.

Like the Callaghan campus, the 85 hectare Ourimbah campus is set in a magnificent bushland setting. The campus is pedestrian friendly – cars are not permitted on its inner roads – so students and staff are privileged to be able to learn and study in peaceful surroundings where the background sound is not the drone of traffic but the call of resident bellbirds.

Planning for the future

University Planner Dr Don Morris spent his lantana to the wetlands on the Callaghan Friends of the University funded signage, for the ‘Don Morris Walk’ as well as the Wilkham wool stores and timbers from a on the campus were used to build the pa who visit the public wetlands, either for it. The good work of Don's Morris has the from Campus Environment Service from Landscape – the only award in the outside Landscape itself. The Hunter Region recognises ‘dedication, perseverance and management at Callaghan. Morn, 12 years, asked that the Award be officially in recognition of the team’s work. Their for water conservation like monards and of course, the native plantings for which t Environmental Sustainability

To recognise our sustainability initiative a Memorandum of Understanding with Council. It oversees the design and r and the distribution of information to research efficiency.

Shark tales

The Port Jackson shark (10cm in length) is a fascinating and versatile predator. It is a relative of the hammerhead shark, living in coastal waters from South Australia to Queensland. Adult Port Jackson sharks can reach up to 4m in length and weigh up to 400kg. They are typically found in shallow bays and estuaries, where they feed on a variety of marine invertebrates and small fish. These sharks are known for their fascinating biology, including their ability to change color and shape to blend into their surroundings. The Port Jackson shark is a well-studied species, with ongoing research aimed at understanding its behavior, ecology, and conservation needs.

Dr William Gladstone, from the School of Applied Science at the University of Newcastle, explains the research project he is involved in, focusing on Port Jackson sharks. His research involves studying the behavior and ecology of these sharks in their natural habitat. This research is crucial for understanding the conservation needs of these sharks, which are facing threats from habitat loss, overfishing, and the impact of climate change.

To promote awareness and conservation efforts, various initiatives have been undertaken. For example, the Port Jackson Shark Foundation was established to raise funds for shark conservation and education programs. Additionally, local communities have organized shark awareness events and lectures to educate the public about these fascinating creatures.

The Port Jackson shark is a protected species in Australia, and its conservation is a high priority. Ongoing research and conservation efforts are essential to ensure the survival of these sharks in their natural habitats.
The University of Newcastle
Australia

Entrenchment

Our commitment to our commitment to our commitment... our environmental

Architectural awards

In 2001 the University won the inaugural Buildings category at the national Banksia Environmental Awards for a series of ecologically sustainable buildings on the Callaghan campus and was described at the "star standout" in the building category.

In making the award, the Banksia Foundation said the "remarkable" series of buildings "grace the picturesque campus grounds at Callaghan" and are "a shining example of how architectural brilliance and outstanding environmental performance can be delivered while still maintaining economic and practical worth."

The Banksia Foundation Environmental Awards are Australia's foremost environmental accolade, recognising outstanding achievements by business, industry and community organisations in their environmental practices and management.

The Wollotuka School of Aboriginal Studies building, Birabahn, has also received awards. Birabahn is an advanced example of an environmentally-stable building, with a fully vertically retractable glass wall, rammed earth walls and a double roof system which allows hot air to be extracted through openings above the central corridor. The building, surrounded by native gardens and ponds, was won two Royal Australian Institute of Architects awards — the Blacket Award for projects outside Sydney in the Energy Efficiency category and the award for Architecture in the Public Buildings category.

The Life Sciences building at the Callaghan campus designed by graduates Professor Peter Stutchbury (of Stutchbury Pape) and Dino Di Paolo (of Suters Architects) brought the Sir John Sulman award to Newcastle for the second time. The previous recipient was James Grose's Architecture Design Studios on the same campus.

The Sulman is the most prestigious architectural award for public or commercial buildings in NSW and is awarded by the Royal Australian Institute of Architects.

"Another PhD student, Robert Hans, is researching methods for determining the age of Port Jackson sharks. His information is vital for understanding Port Jackson shark populations and the age of important individuals in their life history, such as size at sexual maturity. Many sharks are vulnerable to overfishing because they begin reproduction late in their life cycles. The age determination for Port Jackson sharks, Robert is investigating whether the sharks that are caught and released can be measured during their life cycles. The Port Jackson sharks can be traced in the same way, such as tracking sharks by Robert's method, but sharks are not so easy to observe. Robert's research is being supported by a Royal Society of New South Wales grant.\"
Environmental Research

There is a strong history of achievements in teaching and research in the sciences at Newcastle, which can be traced to the University's origins. This includes the Department of Zoology, which was one of the first departments established at the University. The Department of Zoology was later split into separate departments, including the Department of Biological Sciences and the Department of Chemical Engineering and Industrial Chemistry. The Department of Biological Sciences was later renamed the Department of Molecular Biology and Biochemistry.

The Department of Biological Sciences was later renamed the Department of Molecular Biology and Biochemistry. This change reflected the growing importance of molecular biology in research and education. The Department of Molecular Biology and Biochemistry was subsequently merged with other departments, including the Department of Environmental Biology, to form the new Department of Environmental Science.

In 1988, the University established the Centre of Excellence for Integrative Environmental Science. The Centre is housed in the Science and Information Technology building and is supported by a range of government and industry partners. The Centre's focus is on developing integrative approaches to environmental research, with a particular emphasis on understanding the interactions between different environmental systems.

The Centre's research activities are led by a team of experienced researchers, including Dr. Donald Parke, who was appointed as the Centre's director in 1994. Dr. Parke has made significant contributions to the field of environmental research, including his work on the development of new methods for monitoring and predicting environmental changes.

The Centre's activities have had a significant impact on the University and the wider community. The Centre's research has been widely published in leading scientific journals, and its findings have been used to inform decision-making at local, state, and national levels.

The Centre is currently involved in a number of key projects, including the development of new methods for monitoring and predicting environmental changes, and the development of new approaches for managing environmental risks. The Centre is also working closely with industry partners to apply its research findings in real-world contexts.

In conclusion, the Centre of Excellence for Integrative Environmental Science is an important research hub for environmental research at Newcastle University. Its work is having a significant impact on the University and the wider community, and it is well-placed to continue leading the way in this important area of research.

Centre for Sustainable Use of Coasts and Catchments

Located at the Ourimbah campus of the University, this Centre undertakes research to support the sustainable use and conservation of the living resources and environments of coastal and catchment areas. The Centre's research is focused on understanding the complex interactions between the natural environment and human activities, and on developing strategies for sustainable management of these resources.

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Research into women's health at the University of Newcastle has been given a boost with the announcement of an additional $4.62 million over the next three years to continue the Women's Australia study.

The Federal Minister for Health, the Honourable Tony Abbott, AM, OAM, at the announcement at the September launch of a series of reports on key issues in women's health, including weight gain, domestic violence, use of rural health services, paid work, ageing, mental health and the use of alcohol, tobacco and recreational drugs.

The reports come from the Australian Longitudinal Study on Women's Health, widely known as Women's Health Australia, which is funded by the Australian Government Department of Health and Ageing and is being conducted jointly by researchers at the Universities of Newcastle and Queensland.

The study is a national resource which has been examining the health of over 40,000 Australian women in three generations over the past decade. Having been designed to run for at least twenty years, it is now at the halfway point.

Dr Penny Warner-Smith, the Project Manager of Women's Health Australia at the University of Newcastle, said the funding is great news which will ensure the continuation of the study.

"Congratulations must also go to the participants who have generously given their time and shared their health experiences over the past ten years," said Dr Warner-Smith.

"Their willingness to contribute to this project, one of the longest running studies in the world, has ensured ongoing success." The participants were selected in 1995 in three age groups: younger women aged 25 - 29, mid-age women 45 - 50, and older women aged 70 - 75. These particular groups were chosen so women were recruited before they passed through major turning points in their lives.

Dr Warner-Smith said the combination of a longitudinal design, comparative data across three age groups, and access to information on health service use make the project a world first.

Copies of the research reports are available from the website of the Australian Longitudinal Study on Women's Health at www.newcastle.edu.au/centre/wha or by contacting the research team at the University of Newcastle on (02) 4033 6872 or the University of Queensland on (07) 3364 6991.

**Scholarships for special education**

Australia's largest independent special education, the Royal Institute for Deaf and Blind Children (RIDC), is offering scholarships for teachers.

A range of scholarships are available for qualified teachers and student teachers wanting to qualify as a teacher of the deaf or deafened children with vision impairments. The scholarships are linked to employment opportunities at RIDC.

Researchers have found that the long-necked plesiosaurs - one of the most recognisable animals from the Dinosaur era and inspiration of the Loch Ness monster myth - actually ate a wide variety of food, including bottom living hard-shelled clams and snails, rather than just being the specialist hunters of free-swimming prey they were traditionally thought to be.

In a paper published in the international journal Science, Colin McAlpine from the University of Newcastle, Dr Alex Cook from the Queensland Museum and Dr Steve Wise from the University of Sydney, describe two fossil plesiosaurs from the e1asmosaurid family, collected from the rocks of the Great Artisan Basin in Queensland.

"The e1asmosaurs were the ultimate long-necked plesiosaurs - the neck was longer than the body and tail put together. In many ways, the story that they ate fish and squid made sense," said Colin. "The neck was very flexible, and it is easy to imagine them using the extra reach to catch small fast prey.

So the researchers were somewhat surprised when, while excavating a 118 million year old e1asmosaur from Northern Queensland during the 1990s, they found bits of broken clam and small shell in the stomach region of the animal.

"The most amazing thing was the food mass from the lower intestine that we found with it. The indigestible parts of the prey were compacted together, just prior to being expelled, and the result was a solid lump of digested food composed entirely of broken shells from bottom living animals."

"That raised the question - how was this supposedly specialised fish-eater digesting such hard-shelled prey? As far as anyone knows, e1asmosaurs did not have teeth that were capable of crushing hard-shelled animals," said Colin.

Colin believes that the answer to how this plesiosaur digested its meals lies with the large polished pebbles also found within the stomach region of the fossil.

"We know the animal must have swallowed these because you don't get pebbles like that in the rocks where we found this fossil. The role of these gastroliths (stomach stones) has been argued for years, but we have little doubt that these stones would have helped the plesiosaur grind up the clam and eats after it had swallowed them."

Stones were also found in another specimen, collected from central Queensland by the Queensland Museum many years earlier, which also had well preserved stomach contents, including parts of a crab and e1asmosaur gill. The stomach stones in this second e1asmosaur contained minerals which weretrace to a region of volcanic rocks near Townsville, 300 km from where the fossil was found.

The significance of these findings, says Colin, are two-fold. "The Queensland specimens demonstrate that stomach stones probably were very useful for digestion, which doesn't completely sink the alternative theory - that they helped control buoyancy - but means that at least gastroliths had a dual role.

"However, Colin is more impressed with the versatility of the e1asmosaurs' feeding equipment. "We’re not suggesting that free-swimming fish and squid weren't important parts of the diet in these animals. But these finds suggest the e1asmosaur neck may not have been the specialised fish catching structure that we assumed. It seems that they could use the neck to help catch a much wider variety of prey than previously believed.

This observation, Colin believes, may help explain the extraordinary success of the long-necked plesiosaurs, a dominant marine reptile group for 135 million years. "The idea that the long neck was used as a generalised feeding tool is consistent with this success - specialised species tend to die out more quickly. In the end, it took the mass extinction that also killed the dinosaurs, when marine ecosystems were almost completely disrupted, to kill the plesiosaurs off."
A voyage of discovery

From page 1

We joined the King’s Park Botanic Gardens Expedition to traverse the Canning Stock Route in Western Australia...and it was not only a great adventure, but an excellent opportunity to practise what we preach. As educators in Natural History studies at the University of Newcastle, we like to get “out there” to observe, collect, draw and record. As research towards Anne’s PhD studies, our current project is to develop a field art methodology for illustrators. What better way to test an idea (than to join a group of scientists, botanical enthusiasts and adventurers on a voyage of discovery)?

The journey is emotionally inspiring, due in part to hardships of travel, remoteness in such a grand space and environmental beauty captured in detail by our own efforts. Unforfeiginable physical traumas included inclcluding physically violent nights sometimes biting into valuable sleep time, so cold that watercolours at dawn were frozen to the page, and li tiltic unrelenting corrugations of the track threatening to dismantle the vehicles and passengers; and of course the collective agony required to get the vehicles over the dunes.

Vehicle breakdowns to travel bringing home to us our personal fragility. However, these have been soon replaced with exhilaration at the sights and sounds of nature there to be experienced. Every campsite is filled with discoveries, group members generously sharing finds and knowledge. It is to visually record the plethora of material presented for our artistic attention. We soon feel for peer Sidney Parkinson, the artist who accompanied Joseph Banks on Cook’s Endeavour voyage.

Particular memories are emblazoned into our psyche. The colour richness of the geographical features is awe-inspiring. Subtle hues appear brilliant; the colour saturation of some inclusions, flowers and fruits is hard to believe; the clarity of the astrological elements of a desert night and the living colour performances designed by nature during twilight are highlights. The natural beauty of the Australian outback is beyond words and can best be described in pictures and descriptions to design an image. One photograph of an insect for example would never provide all the taxonomic detail, but an illustration may depict several views, include behaviour and morphological characteristics, food and other relationships. A composite image can look “photographic” but can speak a thousand words, providing not only aesthetic, but scientific and educational value.

The University of Newcastle’s Natural History Illustration program sits in a Faculty of Science and Information Technology. Here scientific and botanical illustration is regarded as favourably as it was two centuries ago. The hope is that this is a sign of a new beginning for the modern likes of Sydney Parkinson and Ferdinand Bauer who went on voyages of discovery to record the beauty and splendour of our natural world. There is so much out there that is still to be discovered, recorded and understood. The Canning Stock Route Expedition really proved that.

Written by Anne Llewellyn and Herbert Heinrich

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Anne Llewellyn on the Canning Stock Route

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