



Welcome!

The Cairns Institute supports JCU's strategic intent to create a brighter future for life in the tropics world-wide through graduates and discoveries that make a difference. www.jcu.edu.au/about/strategic-intent.

The Cairns Institute's location in tropical north Queensland and proximity to neighbouring countries in the Pacific and South East Asia offers unique opportunities to enhance human life in the tropics and contribute to a brighter, more equitable and enriching future for its peoples. The Institute is committed to understanding and informing critical processes of social and environmental transformation in the tropics.

As the world's tropical zones face immense social, economic and environmental challenges, the Institute aims to provide innovative research with local, national and global applications. The Institute's core business of research, training and dialogue is embedded in commitments of excellence, social justice and engagement with the societies in which we work. Our unique profile is built on the following key concerns:

- · Creativity and innovation
- · Culteral and linguistical transformations
- Indigenous futures
- · Social and environmental justice
- Sustainable development

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Understanding the Long-Term Sustainable Use of Australian Small Islands

Over two days in early December 2022, fourteen researchers from James Cook University (JCU), the University of Western Australia (UWA), Flinders University (FU) and the Australian National University (ANU) gathered on the Nguma-Bada Campus, Cairns from a range of disciplines including sociology, archaeology, Indigenous studies, palaeoecology and modelling to discuss the long-term sustainable use of Australian small islands. The workshop was organised by Dr Ariana Lambrides and Dr Mirani Litster (JCU) and funded by The Cairns Institute.

The event acted as an 'update' to identify future research agendas across disciplines. Major themes addressed over the four days included contemporary island identity, island environments and landscapes, chronologies of small island occupation, watercraft and connectivity, rock art and stone

structures, models of Australian island colonisation and use, contemporary reef restoration and adaptation, marine resource use on small islands, human-animal interactions on islands and submerged sites. The two days closed with a discussion by modeller Dr Frédérik Saltre from Flinders University on how such themes could be drawn together to model small island use.

It is anticipated that this workshop will act as a launching point from which to engage in broader conversations about Australian islands, including specifically how more voices and perspectives might be engaged in such research and how interdisciplinary approaches might be articulated.

For further information, email ariana.lambrides@jcu.edu.au or mirani.litster@jcu.edu.au



Image: (Left to Right) Dr Shimona Kealy (ANU); Dr Daryl Wesley (Flinders University); Prof Jo McDonald (UWA); Dr Lauren Linnenlucke (JCU); Prof Sean Ulm (JCU); Dr Frédérik Saltre (Flinders University); Dr Ariana Lambrides (JCU); Prof Stewart Lockie (JCU); Dr Mirani Litster (JCU); Dr Cassandra Rowe (JCU); Dr Magdalena Bunbury (JCU); Prof Peter Veth (UWA); A/Prof Mike Rowland (JCU) and A/Prof Felecia Watkin Lui (JCU). Credit: Mirani Litster



Special Issue on Climate Justice Education

The Cairns Institute researchers Associate Professor Hilary Whitehouse and Adjunct Professor Bob Stevenson were invited to edit a special issue of the Australian Journal of Adult Learning (AJAL) on climate justice education. The special issue was published In November 2022.

Adult climate education generally receives less scholarly and practical attention in comparison to the global efforts placed on the role of formal schooling to address the climate crisis. The aim of the special issue is to promote further discussion of the role of adult education and learning to showcase emerging theory and practice.

Australian and international scholars working within the field of adult education contributed to creating an issue brimming with ideas and seasoned analysis that reveal many complexities within adult climate justice education.

The research papers and stories from practice illuminate diverse approaches that adult educators are adopting in response to the climate crisis. Some papers focus on work within the formal tertiary education sector, others focus on community-initiated and based learning strategies.

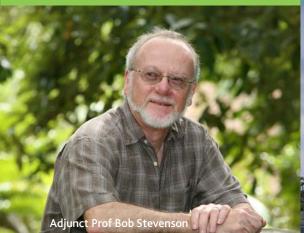


To give some examples: The Cairns Institute Fellow Dr Larraine Larri publishes work from her PhD thesis on an original facet of adult social movement learning. In exploring climate justice education in action, her paper describes and analyses the peer learning pedagogy and the networked, informal education strategies employed by the Australian Knitting Nannas against Gas and Greed (KNAGs) termed 'Nannagogy'. Dr Larri makes visible the learning that underpins the successful, national activism of the Nannas in their fight for a more climate stable future.

Professor Chunlin Yao showcases his pedagogical response to climate change using compulsory English language classes at his university as a site in which to develop undergraduate students' climate literacy. This tactical pedagogy helps students to improve their foreign language knowledge and skills as well as develop their critical wholistic climate thinking. Professor Yao shows how educators can innovate alternative curricular as means for expressing their social and ecological values.

In separate papers, Whitehouse (with RMIT colleague Annette Gough) and Stevenson address climate justice education with a policy or political focus. Whitehouse and Gough conducted a content analysis of selected frameworks and policies developed under the auspices of the United Nations that revealed increasingly detailed frameworks to support climate justice education. In the absence of national policy, they argue it is time for Australia to cease gesturing and start acting to develop coherent national and state policy for climate justice education for citizens of all ages in line with climate education responsive United Nations settings.

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Special Issue on Climate Justice Education - cont'd

Stevenson describes the significant contribution of youth, women and the environmental climate movement to the May 2022 federal election results in finally bringing hope for national climate action. Despite these gains, he argues, much more remains to be urgently accomplished, namely specific plans to rapidly phase out and replace the use of fossil fuels, curb methane emissions and forest clearing, and broadly increase climate mitigation and adaptation. Learning and negotiation within climate movements and their subsequent actions to shape government policy development are portrayed as critical to the successful enactment of more ambitious and effective climate policies.

There are several examples of innovations for adult learning in the special issue relevant to educators and the community. Climate justice learning can work effectively within the varying traditions of adult education and lifelong learning to fully address the multiple injustices associated with climate breakdown.



The work published in the special issue shows that the desire for global transformation drives innovation in adult education both nationally and internationally across the formal, informal and community sectors.

Email hilary.whitehouse@jcu.edu.au to receive an e-copy of the special issue.

Image credits HIlary Whitehouse and Bob Stevenson. Left page: IWD 2019 Dominique Jacobs. Above: GAB 2017 Sydney. Below: KNAG Chinchilla gasfields.





Woven Stories

James Cook University anthropologists were delighted to have the opportunity in late 2022 to collaborate with the Cairns Regional Council in a significant exhibition of artefacts from Papua New Guinea.

The Woven Stories exhibition was the brainchild of Chris Stannard, Curator, Cairns Regional Council and Dr Maria Wronska-Friend, anthropologist and museum curator, who is an adjunct research fellow at The Cairns Institute. As a complement to the exciting Bilum Stories exhibition focusing on narratives about the continuing importance of string bags (bilums) among Papua New Guineans in Australia today, Maria and Chris had the idea of curating an exhibition of bilums from two different PNG artefact collections in James Cook University's Material Culture Collection.



Most of the artefacts in the Woven Stories exhibition were from a collection known as the Telefomin collection. This collection was made by Maria in the Telefomin District, on the border of Sandaun (West Sepik) and Western Provinces, among a people commonly known as the Min people (including the Telefolmin, Mianmin, Atbalmin and Faiwolmin). What is unique and very valuable about the collection that Maria made is that it represents the only full, systematically organised inventory of material culture used by this group of people at a particular moment of time, in the late 1980s.

As it was to be a teaching collection for JCU anthropology and museum studies students, Maria also collected unfinished objects in various stages of manufacture, one of which was on display in Woven Stories – an incomplete tree-bark fibre and pandanus bilum from the Mianmin area. In addition, the exhibition featured several woven items from a collection made by Dr Laurie Bragge – a woven bridal Veil made by latmul people from Tambanum Village in the middle Sepik and a set of three woven fibre figures from the Pangia district in the Southern Highlands.

Professor Rosita Henry, who worked with Maria and Chris to curate the exhibition, presented a talk at the exhibition opened on Friday 4th November. On the 12th November, Rosita and Maria jointly did a curator's talk and tour of the exhibition for a very interested group of visitors. The Exhibition was very well attended, drawing a large crowd of visitors from the community of Cairns and surrounds, as well as many tourists, as reflected in comments in the Visitors' Book at the entrance to the Exhibition.



Images: (left) artefacts from the JCU collection, and (above) Mosman local Siddarth Murad was fascinated by the bilum weave. Credit: Vyvyen Wong



Woven Stories - continued



Attendees were treated to a brief rendition by PNG-born opera singer Heru Pinkasova for her Bilum Mamma show which featured at the Cairns Performing Arts Centre Studio on November 11. Those who attended echoed the need for this show to be given a larger platform and to be taken on the road around Australia.

Images: (Above) Prized bilum piece in the JCU Collection, (above right) Cairns Regional Council staff and JCU Alumni Adrian Morris assisted in the exhibition is pictured with Prof Henry. Cairns local Kissi Klink pictured (middle right) with her bilum story also featured at The Courthouse Gallery. Bilum Stories curator Moale James (right) from Little Match Productions. Credit: Vyvyen Wong





Plastic Futures, or a better Anthropocene

A public event in the Cairns Museum was curated by Audio-visual Anthropologist Dr Daniela Vavrova; TCI Adjunct Research Fellow and the Cairns Museum's curator. The event on November 25 was led by a feature presentation by Distinguished Professor Stewart Lockie.

Professor Lockie presented the ideas about the future we could imagine. He built his vision around up-to-date statistics showing the trends in plastic production, usage, consumption, and the plastic waste management. Moreover, with his current project about the Reef Restoration and Adaption, he calls for protecting the reef, recovery and strengthening corals tolerance to climate change. It is about a united global movement to stop producing and using the plastics. He encourages us to revive our oceans with less consumption and more justice, creativity, dialogue, innovation, and democracy!





The current exhibition in the temporary gallery of the Cairns Museum features 'Beach Couture: A Haute Mess'. It is a travelling exhibition of Marina DeBris, an artivist whose fashion design is more about talking about it than wearing it!

The exhibited couture reflects the era of plastic pollution we live in. The displayed artefacts of Anthropocene provoke the audience to make their own key to the numbered relics of the past. The showcased videos explain the irony of Inconvenience Store and the scientific consequences we face due to our consumerism and addiction to it.

https://www.cairnsmuseum.org.au/exhibitions_blog/beach-couture/



Images courtesy of Daniela Vavrova.



Tyá Dynevor joins CoTS

Tyá Dynevor is a proud Aboriginal, Torres Strait Islander mixed-race woman; born on Dharawal Country, Campbelltown, Greater Western Sydney but had grown up between Darwin, Larrakia Country and Cairns, Gimuy-walubara Yidinji and Yirrganydji country with her mother. Her mother's people are the Gudjal people (Charters Towers); Gurindji people (Northern Territory) and the Gumuligal of Wagedagam peoples from Mabuiag Island and her father's people are from the Kullili tribe (Thargomindah).

Currently enrolled in a Bachelor of Science, majoring in Zoology and Ecology at JCU, she has recently commenced a Research Assistant role on the Crown of Thorns (CoTS) project. Tyá is grateful to Dr Vincent Backhouse, A/Prof Felecia Watkins-Lui and Prof Stewart Lockie for this opportunity to understand and develop meaningful conservations and engagement with Traditional Owners on the CoTS research project.

Last year, Tyá attended the NAIDOC Executive Breakfast. She explained what it meant to her. "The Get Up! Stand Up! Show Up! NAIDOC theme really resonated with me on a personal level because I felt pride and resilience within myself and my Ancestry. From being a direct descendent from the Gurindji Peoples, participating in The Wave Hill "walk off" in 2009 to living on Waiben Island, also known as "Thursday Island", for one and a half years in 2002 with my mother."

"The three presenters tackled recurring issues that impact our People and Communities in these different campaigns: Convoy to Gurindji, 'Our Island Our Home' and the Wangan and Jagalingou (W&J) Family Council. They all share this common message: the truly unfortunate and devastating influences made up by

western mindsets and cultural frameworks has significantly impacted and will continue to impact the natural world of our planet Earth. There is an urgent need for change and to return to our traditional practices and ways of living but in a more modern yet sustainable approach."

Tyá loves 2023 NAIDOC theme "For Our Elders". She feels this will relate to their work on the CoTS research project because it is an opportunity to allow the Elders in all the coastal communities across Queensland to connect with their research, engage with Western Science Practices and for Institutions to respect and acknowledge the history and traditional knowledge from the Traditional Owners (Custodians).

She believes the theme: "For Our Elders" as an opportunity to learn from our Elders; learning to appreciate and share their stories, knowledge, songlines, dreamings, struggles and their mission for positive change. "Our Elders and Senior Lore People teach and view education from a holistic perspective between two Worlds: Western and Indigenous. This can encourage institutions to implement the integration of Traditional Knowledge and Western scientific practices and concepts, by finding the "middle ground" ideologies in science".

Tyá aims to continue to integrate her tertiary education with her traditional knowledge to further understand what protecting and preserving country, culture and spirituality looks like. She hopes this will include; bettering their lifestyles through living more sustainably, striving for positive social implications and improving education systems and institutions.



Building Global Sustainability Through Local Self-Reliance: Lessons from Landcare

Allan Dale was one of the editors of a booked titled "Building Global Sustainability Through Local Self-Reliance: Lessons From Landcare". The book was published with the Australian Centre for International Agricultural Research (ACIAR) and Global Landcare.

The book launched at the 2022 National Landcare Conference, in Sydney explores the grassroots revolution in environmental management and agricultural extension through Landcare by neighborhood groups. It also explores how this concept can be used to tackle global problems such as climate change and post-disaster recovery.



In the foreword, Andrew Campbell ACIAR Chief Executive
Officer said; "We face urgent imperatives to transform food
and farming systems to feed growing human populations
better, within environmental limits, while managing climatic
extremes, military conflict and disease risks. Meeting these
imperatives requires fantastic science and innovation. Equally, it
requires communities at a local level to develop and implement
their own responses to their own deeply contextual challenges."

Andrew also identified the important role that groups such as Landcare play in the ecosystem and the sense of ownerships that Land Care can provide grassroot organisations.

"The empowerment of neighbourhood groups to take ownership of environmental problems and solutions both catalysed and reflected a grassroots revolution in environmental management and agricultural extension in Australia. By the end of the 1990s, farming families and other rural and coastal landholders saw themselves as active agents in the stewardship of their district, environment and community."

Allan has spent the better part of five years collaborating and editing with thirty-one chapter leads and co-authors to bring this book together, in which researchers and practitioners from eleven countries share their expertise and experience of Landcare around the world.

To obtain a copy or view sections please visit https://www.aciar.gov.au/publication/lessons-global-landcare

Image: (left) Allan Dale, ABC Presenter Costa Georgiadis, Global Landcare Chair Andrea Mason & ACIAR CEO Andrew Campbell. Credit: Michelle Dale

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Falling from the sky

James Cook University Associate Professor and The Cairns Institute Fellow Robyn Glade-Wright is passionate about climate change and seeks to communicate with the greater public about environmental science through the use of the arts. Robyn is curating the upcoming exhibition "Falling from the Sky" which she says was inspired by the plight of bats in Cairns that fell to their death in the hot summers a few years ago. She said the exhibition focuses on negative impacts of climate change and environmental pollution that have produced a threatening environment for birds and other non-human forms of life.

The exhibition will involve works from established Cairns artists as well as from our secondary student communities of Smithfield State High, St Monica's College and Trinity Bay High School. The exhibition will open May 5 on Nguma-Bada campus at The Cairns Institute, the Lux Gallery in Building A4 and the JCU Library in B Precinct.

Keep your eyes peeled for artwork to be displayed on the exterior of The Cairns Institute building in a few months time, it will be Robyn's main piece titled "Mercury Rising" which seeks to address the bioaccumulation of heavy metal in waterbirds.

Interdisciplinary Symposium

Robyn is not one to sit idly, she is also the project lead for an Interdisciplinary Symposium titled "Environmental Communication: Science Inspired and Arts Delivered".

The symposium will be held May 5 in person at Nguma-Bada

The symposium will be held May 5 in person at Nguma-Bada, Cairns, video-linked to Bebegu Yumba Townsville and online.

Call for abstracts open

Abstracts can address the theme of Environmental Communication, where climate messaging is inspired by science and delivered in the form of the arts. The virtues of science-inspired and arts-delivered forms of environmental communication is relevant to scholars and teachers interested and engaged in sustainability education. Yet, environmental communication in the arts and creative writing are not widely understood. Bridging this interdisciplinary gap has the potential to deliver crucial and complex climate messages to the public.

Abstracts for 15-minute presentations from a range of disciplines that respond to the theme are welcomed. Robyn encourages submissions that consider:

- The challenges and benefits of working at the intersection of arts and sciences
- The role of imaginative works in communicating both dire and hopeful climate futures
- Communications and arts approaches to environmental science
- How art and culture are impacted by environmental crises
- Writing and art that aims to communicate environmental problems and/or solutions
- The educational potential of arts in the climate/environment space
- The limits of scientific communication in environmental crises
- Other approaches to the theme not included here

Submit 150-200 word abstracts, a 50-100 word biography, and your institutional affiliation by March 31 to Robyn.gladewright@jcu.edu.au

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Western Cape Futures Symposium

The TNQ Drought Hub, Sustainable Aboriginal and Torres Strait Islander Enterprise (SATSIE) program are pleased to partner with the Western Cape Chamber of Commerce, Aurukun Shire Council, Mapoon Aboriginal Shire Council, Napranum Aboriginal Shire Council, the Weipa Town Authority, the Torres and Cape Indigenous Council Alliance, Western Cape Communities Trust and Rio Tinto to deliver the Western Cape Futures Symposium (WCSF) which be held in Weipa March 23-25.

The Western Cape consists of the communities of Weipa, Napranum, Mapoon & Aurukun, culturally rich communities with a deep connection to country. It is a vibrant, diverse region serving as the economic hub of Cape York. The region boasts numerous strategic and logistical advantages, including the northernmost deep-water port in Queensland, freight and logistics opportunities, a skilled workforce, a strong tourism industry, and an abundance of natural resources. Yet the region is facing many challenges; a transitioning economy, climate impacts, tourism impacts, infrastructure and supply chains.

The Futures Symposium provides an opportunity to shine a spotlight on the Western Cape region, and explore the opportunities, potential and barriers to regional development

in the Cape, by connecting innovators, industry leaders, government, traditional owners, local business and community. WCFS will explore the options around transitioning towards a more diverse and sustainable economy, enabling new industry and investment into the region.

Weipa Town Authority Elected Member and
WCFS Chairperson Jaime Gane said;

"We are very excited to welcome people to the Western
Cape Futures Symposium. Our region may be small in
numbers, but it has a big geographical footprint,
it is rich in economic opportunities, natural resources
and is of significant national strategic importance.
The symposium gives us a genuine opportunity to
connect and enhance collaboration between local
residents, policy makers and key stakeholders."

For more information:

Email symposium@westerncapechamber.com.au or Visit https://www.westerncapechamber.com.au/symposium







Rural Economies Centre of Excellence (RECoE) 2.0

RECoE is a first-of-its-kind rural economic research collaboration comprised of four Queensland Universities: The University of Queensland (UQ), James Cook University (JCU), Central Queensland University (CQU) and the University of Southern Queensland (USQ).

Established with the Queensland Department of Agriculture and Fisheries in 2018 for an initial 3-year period with a combined funding of \$3.6M, the centre divides its research portfolio into five themes: economic tools and analysis, regional innovation, value chain analysis, policy development; and translation and engagement. JCU RECOE lead is Professor Allan Dale in collaboration with RECOE Research Director Hurriyet Babacan.

The Queensland Department of Agriculture and Fisheries (DAF) has partnered with the Rural Economies Centre of Excellence (RECoE) with the purpose to have an impact on how regions can survive and thrive into the future through the Regional Drought Resilience Planning (RDRP). Five regional communities were selected for the foundational year. In the second round, the remaining nine regions will develop RDR plans to prepare for future droughts, with a sharp focus on the agricultural sector and allied industries.

JCU has received an additional investment for round two of Regional Drought Resilience Planning (RDRP) and will focus on supporting implementation of existing plans and progressing new plans in the regions of Far North Hinterland to Gulf, Wet Tropics and in collaboration with UQ, Townsville and Palm Island. Based on evidence and collaboration through partnering with local councils, regional stakeholders and other organisations,

the plans – led and owned by the community – aim to drive decisions, actions and investments to proactively manage drought risk.

Round two is due to be completed mid-2024.

For more information about RECoE or RDRP visit ruraleconomies.org.au

Queenslanders are drought resilient when...

1 We understand the potential drought risks we face

2 We work together to better manage drought risk

We seek new opportunities to reduce drought risk

We continually improve how we prepare for, respond

Source: Adapted from the four objectives of the Queensland Strategy for Disaster Resilience, courtesy of the Queensland Reconstruction Authority.



Image: (above) RECoE Director A/Prof Ben Lyons talks to USQ Elder Uncle Wayne Fossey at the first Annual RECoE Forum in October 2019.



Our Sea of Islands: protection and conservation

The Oceania region has an incredible array of ecosystems and biocultural diversity along with many threats to those.

Safeguarding and effectively managing such ecosystems and the livelihoods and cultural expressions linked to them is of paramount importance for the sustainable development of the region.

However, what is the status of doing so? What have we learnt so far? What is needed into the future?

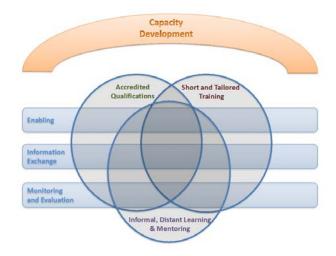
TCI Adjunct Associate Professor Lea M Scherl has been involved in the recently launched compilation of the first comprehensive report on the state of knowledge of natural resource conservation and management in the Oceania region addressing the topics of "Management Capacity" and "Well-Being" (with other topics reviewed being: "Coverage and Connectivity", "Law and Governance", "Management Effectiveness", and "Sustainable Financing").

Management Capacity

Strong stewardship of nature is an intrinsic part of the culture of people in Oceania. Whilst many very capable and motivated people work in protected and conserved area management, there remains significant weakness at the institutional and individual levels. Lack of capacity is likely to be a major impediment for natural resource management and conservation region-wide.

The publication highlights a range of competencies needed for protected area management in the region from a consultation process with stakeholders. Analysis supports the need to involve a diversity of groups in capacity-development because natural resources management is a shared responsibility across land and sea stewards, management institutions and personnel, and other partners who can also learn from each other. Through a developed

framework for capacity development suited for the region (see figure) more detailed analysis of the status-quo of each component of this framework, with clear examples, is presented. For instance, opportunities based in the region for accredited qualification on protected area and natural resource management does not exist and at the tertiary level institutions are still struggling to get funding to create more streamlined curriculum. Moreover, much good human-capital is lost as they receive overseas scholarships and may not return after completion of studies. Whilst many short-term training opportunities exist mainly tied to project implementation those are tailored to service the needs of such projects with curricula and approaches rarely shared. A region-wide compilation of such opportunities, courses and their teaching approaches has been very challenging to achieve even with the existence of a specific Pacific Island Protected Area Portal managed by the South Pacific Regional Environmental Program (SPREP). Informal learning and mentoring are very important in the region, as it also suits cultural ways of transmitting knowledge, and have been supplying much of this capacity development opportunities mainly through on-the-job activities and the occasional exchanges facilitated by projects.



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The recommendations needed are: for better understanding of which approaches for capacity development work (or does not) and for what reasons in the region (with systematic monitoring and evaluation); for foremost strengthening the local, national and regionally-based institutions to deliver and tailor capacity development to the diversity of cultural contexts and practitioners' need; and for dedicated, long-term and sustainable resource basis that benefits such institutions, foremost, whilst supported from partnerships with international counterparts.

Well-being

Protected and Conserved areas are socio-ecological systems because in varying situations and in different ways people live within, has a relationship with the area, depend on it for livelihoods and in a broader context, they form an important part of sustainable development of a region and a country. The regional Asia-Pacific report of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services Assessments (2018) mentions there is ample evidence that human well-being in the region is deeply connected with nature. However, a more recent worldwide analysis (Dawson et al 2021) yield no rigorous scientific research in the Oceania region (primarily the Pacific Islands here) on the links between effective conservation management and improvement on well-being.

However, there is growing recognition in the region that effective natural resource management is vital for maintenance of the ecosystem services which form the basis for livelihoods and sustainable development at all levels from local communities, sub-regions, nationally and region-wide. Thus, the existence of descriptive evidence based on implementation of projects and programs on

maintenance of cultural traditions, access to food, water, raw materials, medicinal resources, and for income-generation activities such a tourism and sustainable harvesting all possible because of natural resource management and conservation. In addition, there is ample recognition that the latter supports regulation of climate, natural hazards, water quality, and pollination. For instance, the importance of livelihoods' nature-dependant activities (e.g. tourism, agriculture, selective harvesting of non-timer forest products, etc.) was documented from a systematic lessons learned process of a five years nature conservation and development GEF funded project in Samoa, Vanuatu, Fiji and Nuie (Scherl and Hahn 2017). The replenishment of fish stocks in 'no-take' closures within Local Managed Marine Areas (LMMAs) in Fiji Vueti Navakavu, LMMAs where the spill-over effects of fish stocks was documented as contributing to livelihoods (e.g. Scherl, LM et al 2008). In Papua New Guinea where the formation of the Tenkile Conservation Alliance to, initially, protect the critically endangered Tenkile Tree Kangoroo and the Torricelli Mountain brought along with it community support for much needed infrastructure; and where the Hunstein Range Wildlife Management Area, the largest lowland rainforest Protected Area in PNG was created with a key incentive to curtail disturbance of the millipede shaped forest spirit that inhabits the higher reaches of Mount Sansai culturally important to local communities.

The adoption of biocultural approaches is advocated that give local people, a legitimately recognized equal voice in designing, implementing and monitoring of protected and conserved areas and with that the need to develop culturally appropriate indicators of conservation outcomes (Sterling et al 2017). For that to happen the distinction between rightsholders and stakeholders becomes important as well as appropriate governance systems that carefully address equity and the sharing of rights, benefits and costs.

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Nature Feelz Symposium

In December 4-8, The Cairns Institute Fellow, Dr Larraine Larri and JCU Doctoral Candidate, Nita Alexander participated in the Sydney Environment Institute, "Nature Feelz Symposium" at the University of Sydney.

The transdisciplinary symposium aimed to reflect on how heightened ecological distress informs our responses to the climate crisis. It drew contributions from scholars, activists, artists, therapists, citizens and community members, showcasing the diverse and creative approaches to experiencing, suppressing, making sense of, managing, preventing, intensifying, and resisting ecological distress. Also considered were the ecological emotions of beings other than humans. Sessions were designed to garner insights from people collaborating across disciplines and practices attempting to expand our conceptual scope towards addressing these issues.

Larraine's presentation, "The craft of wisdom: Climate activist learning in the hands of Australia's Knitting Nannas" explored how crafting became the core social movement learning process of the Australian Knitting Nannas and a strategy for generating climate activist hope.

Nita, "(In)Action: Harm and hope in young people's climate activism" drew on her latest doctoral work-inprogress paper. She presented an exploration of young people's emotional connection to the ecological crisis that climate change presents. Young people continue to be largely excluded from politics. Dominant adult-centric narratives express concern for young people's welfare in the face of climate despair. These narratives suggest that it is causing them harm to engage with the climate change crisis.

Of particular interest was the work being done by psychologist researchers Samantha Stanley, Teaghan Hogg, and Léan O'Brien on eco-anxiety, mental health, and pro-environmental behaviours. Their presentation defined the main features of climate anxiety and presented data on how eco-anxiety affects people.

Key findings included:

- Experiencing eco-anger predicted better mental health outcomes, as well as greater engagement in pro-climate activism and personal behaviours;
- Eco-anxiety and eco-depression were less adaptive, relating to lower wellbeing; and,
- Those feeling eco-depressed were more likely to report
 participating in collective climate action, while those feeling
 eco-anxious were less likely to join the cause.
- Eco-anxiety is increased by engaging in social media and science communication. It is decreased most by nature connection, engaging in climate justice activism, and mindfulness or meditation practices.

For more information, contact larraine.larri@my.jcu.edu.au

Image: (below) Nita Alexander





TNQ Drought Hub Capacity-Building Forum

The TNQ Drought Hub, which has recently moved to The Cairns Institute, held a capacity building forum for its team members in late November. The two-day event saw over 30 participants learn from climate, extension and health industry experts as well as participate in facilitated collaborative discussions about the different TNQ Hub Programs and their activities, strengthen existing relationships and form new ones.

A significant part of the forum was the extension, co-design and facilitation activities led by Enablers of Change. The group was taken through the process of facilitating high impact events that would result in attendees taking action post event. Processes included idea generating, pre and post event planning and activities and recognizing adult learning styles.

This was a key learning experience for the group as workshops, fieldtrips, paddock walks, conferences and other extension events are an important part of the Program Leads and Drought Resilience Coordinator (DRC) activities. Cape York Node DRC, Harry James said Enablers of Change "provided a lot of useful tips for running impactful workshops. I'll definitely be trying to apply some of those methods during our workshops in 2023".

Using the other tools and activities discussed during the forum with Enablers of Change, Agricultural Innovation Program

Designer, Justin Whittle led the group through several discussion and idea generating activities. These included having breakout sessions with a Program Lead and DRC in each group discussing regional priorities and how their activities meet these priorities and how different team members can add extra value.



The forum has already created opportunities with further linkages between Mackay Whitsunday Node, Reef Catchments and the Transformational Agriculture Systems Program, a Burdekin Node, NQ Dry Tropics led Future Drought Fund grant, engagement requests to discuss the impacts of drought on mental health and a planned future workshop between different climate program presenters to ensure land managers and industry are getting the information required to make future focused business decisions.

For further information about the TNQ Hub, contact tnqhub@jcu. edu.au or visit www.tnqdroughthub.com.au/



Images from the workshop courtesy of Emily Harrington

Research in tropical societies



SATSIE 2022 Highlights

Allan Dale heads the TNQ Drought Hub team that sits within The Cairns Institute and delivers the Sustainable Aboriginal and Torres Strait Islander Enterprise (SATSIE) program. The SATSIE teams work and collaborate with a number of critical partners and stakeholders to encourage innovation and develop economic opportunities that offers positive social, cultural, and economic impacts for Indigenous community members.

Some of the highlights for 2022 included:

- 1. Supporting Aboriginal engagement in agriculture and agribusiness by raising awareness with Aboriginal groups about their rights and interests in water under Queensland's Water Act and water plans, and outlining processes for how these water rights can be considered and utilised. In this regard, we have been working with at least 4 significant traditional groups across the TNQ landscape and 3 regional traditional owner networks. All of these groups are looking to become more involved in water use and management, including how they can use the water themselves for achieving their cultural values, agriculture, or trade the water with third parties for agricultural use. This support has already raised over \$1 million of investment in facilitating traditional owners in progressing these aspirations.
- 2. Preparing a manual with the draft title of Achieving First
 Nation Aspirations in Freshwater in North Queensland A
 Manual about enhancing First Nation Participation in Water
 Planning, Management and Governance. This emerging manual
 outlines existing Aboriginal rights and interests in water in North
 Queensland and how they can be accessed and used, as well as
 identifying procedures for engagement in and influencing
 upcoming water plan reviews to improve cultural flows and
 Indigenous reserves in the next iteration of these plans.

3. Supporting a number of events that aimed to help build resilient Indigenous businesses and communities by connecting to innovation and entrepreneurship opportunities. Events supported include a Thursday Island Business Month Forum, Keriba Building and Construction Program Business Workshop, Screening of Tender Community Funerals film in Cairns and Thursday Island, the Indigenous Food and Business Expo in Cairns, Indigenous Food Gathering and the Engineers Without Borders Dawul Wuru Aboriginal Corporation Showcase Challenge. They have also been working with the Deadly Business Program and the Queensland Social Enterprise Council (QSEC) and have connected a number of Indigenous businesses and innovators throughout the region.

Moving into 2023 the team will continue working with North Queensland traditional owner groups and Indigenous businesses to assist them to access and benefit from their water interests and rights, especially through the use of their allocations in Indigenous water reserves in water plans. This work will also focus on combining Aboriginal land and water rights so that agricultural development and other uses may be successfully achieved and provide beneficial outcomes for Aboriginal people. SATSIE will continue to showcase a number of Indigenous innovations and businesses; a showcase event in 2023 will partner with the Councils of Aurukun, Weipa, Napranum and Mapoon in the Western Cape Futures Symposium to be held in March. On the back of strong partnerships with the Torres and Cape Indigenous Councils Alliance, the Gulf Savannah NRM, Cape York NRM, Terrain NRM and FNQ ROC, they will continue to support the Regional Economies Centre of Excellence to develop and progress implementation of emerging Regional Drought Resilience Plans.



Strait Business: Actions Today Impact Tomorrow

As part of National Indigenous Business Month in October the TNQ Drought Hub were pleased to partner with the Department of Senior Disability Services Aboriginal and Torres Strait Islander Partnerships (DSDSATSIP), and the Department of Employment, Small Business and Training (DESBT), to deliver Strait Business Actions Today Impact Tomorrow. The business supports and showcase event was held on October 25 at Island Stars Thursday Island.

The event was designed to support and build sustainable Aboriginal and Torres Strait Islander enterprises. They also developed and held presentations. There was a large amount of information available for people interested in business, existing businesses and anyone thinking of study business from information and stalls and presentations including;

- Deadly Business Program, DESBT
- Supply Nation
- Torres Strait Regional Authority (TSRA)
- Torres Shire Regional Council (TSRC)
- Gur A Baradaraw Kod (GBK)
- James Cook University (JCU)
- TAFE North
- Torres Strait Aged Care
- DATSIP
- National Emergency Management Agency
- Torres Shire Council (TSC)
- Black Coffee



The event hoped to spark ideas that inspires the Strait businesses of tomorrow, increasing the impact for people, communities and country of the future. It also offered to provide practical support and networking for existing businesses. Around forty people attended the event and plans for a similar event in 2023 are already underway.



Research in tropical societies



Engineers Without Borders Update

The Cairns Institute and the TNQ Drought Hub played host to the Engineers Without Borders (EWB) Challenge Showcase on December 10. The EWB Challenge design brief is developed based on a set of sustainable development projects identified by EWB Australia with a community-based partner organisation.

The 2022 'EWB Challenge Showcase' event community-based partner organisation was the Dawul Wuru Aboriginal Corporation. On Country issues were identified by the Dawul Wuru and sent to 11,000 engineering students and teams from 23 participating universities across Australia and New Zealand to share their innovative design ideas back to EWB and Dawul Wuru. The design ideas aimed to enable Yirrganydji people to sustain wellbeing, culture and care for their rainforest and coastal land and sea Country between Cairns and Port Douglas, for the benefit of current and future generations.

Of the 11,000 students, the top 35 students consisting of 13 teams were selected to showcase their engineering solutions in Cairns. The universities with finalist teams were;

Charles Darwin University

Griffith University

RMIT University

Swinburne University of Technology

University of Canterbury

University of Technology

Sydney

Curtin University

Melbourne Polytechnic

University of Adelaide

Transportable renewable power solutions

University of South Australia

University of Western Australia

There were many innovative solutions showcased that identified solutions to issues experienced by Rangers. One issue is the safe relocation of crocodiles as they have become aware and evade the ranger boats due to noise and vibration. A couple of noise and vibrations solutions were presented. There was also a more environmental and sustainable aquaculture fish trap, renewable power solutions, a couple of mobile applications to provide cultural awareness and knowledge, ways to reduce waste and prevent plastics on the reef and coastline, artefacts-specific storage and display solutions, and various ways and methods to build portable, transportable ranger stations. Dawul Wuru Land and Sea Rangers Brian Singleton and Gavin Singleton were included on the judging panel which had a difficult task selecting the best from the high quality of finalists.







Showcase Pitch Award: Team with the most outstanding design project pitch during the Showcase went to Griffith University - Catching Kunyarra. The team designed a noise insulating motor cowling that aims to reduce noise and vibrations from crocodile monitoring boat, featuring an insulating layer made from sustainably-sourced sugarcane bagasse.

Community Partner Award: Team whose project most strongly considers the aspirations of Dawul Wuru and for their traditional Yirrganydji Country went to the University of South Australia – Modular Community Centre. The team designed a transportable and modular flexible meeting space for the Yirrganydji people which can act as a multi-purpose communal space and visitor hub.

Best Stall Award:Team with the most engaging stall design went to Curtin University who redesigned the boat engine to reduce vibrations caused by crocodile monitoring boats.

People's Choice Award: Team that wins the hearts of attendees by receiving the most popular votes went to Charles Darwin University for their Bamboo Tube Pot for mangrove revegetation, and to RMIT University for their Citizen Wildlife Reporting App Industry Reviewer Award: Team with the highest scoring report as determined by our volunteer industry reviewers went to Western Sydney University for their Nursery for cultivating bush tucker.





This initial education-based collaboration has also opened up opportunities between EWB engineering programs, and Dawul Wuru as they have identified potential pro bono projects that aim to work on through the 'Engineering on Country' program, which aims to support Aboriginal and Torres Strait Islander peoples to live safely and productively on Country and pursue their community aspirations, through improved access to engineering, technology and infrastructure.

Prior to the showcase the students were taken on an On-Country tour and had the chance see and learn more about the country and the work and culture of Yirrganydji people. Additionally, throughout the showcase event sessions were held with Students and Yirrganydji Rangers to share knowledge and experience. In one session Lomas Amini, a Social Designer from Djahmu Dreaming was also able to contribute and share his experience from his recent visit to Dutch Design Week.

The 2023 EWB Challenge will be held in Cambodia and will focus on the village of Pu Ngaol in Mondulkiri province.

For more information about the showcase challengers of EWB visit https://ewb.org.au/

Research in tropical societies



Kampus Merdeka Program

The Cairns Institute (TCI) and the State University of Malang, in East Java, Indonesia, have collaborated in conducting an analysis on the student learning experience in **Industrial Internship**; one of the prominent programs initiated by Kampus Merdeka (Freedom Campus). Their senior lecturer A/Prof Dr Muslihati presented the research at The Cairns Institute.

Contributors to this research included her own colleagues from State University of Malang; A/Prof. Dr. Ahmad Yusuf Sobri, A/Prof. Ani Wilujeng Suryani, A/Prof. Surjani Wonorahardjo, as well as TCI Adjunct Research Fellow Dr. Brian Fairman and TCI Adjunct A/Prof Adam Voak. JCU PhD Candidate Dwi Sugiharti assisted Dr Muslihati during her visit.

Initially launched by the Ministry of Education, Culture, Research and Technology, Industrial internship program allows students from various universities to join this program by registering through the website. Partner companies that will become industrial internship locations are also involved in the selection process, where teams from each company select prospective participants through their profiles and achievement data.

The Merdeka Campus industrial internship program provides several advantages for students.; from receiving an internship certificate which adds value to their competency profile, and to expertise certifications such as a halal supervisor certification and an International Microsoft certificate.

This research explored data on various student learning experiences in carrying out industrial internship programs through questionnaires which included learning experiences in cognitive aspects (increasing knowledge insight, critical and

analytical thinking skills) and affective (self-management, emotions, soft skills and interpersonal skills), and psychomotor (technical and operational skills).

From the focus group discussions, industry interns said the experience of collaborating in developing work programs and creating the latest innovations were valuable. The different contexts in the company provided opportunities for them to gain new knowledge and the demands in the field made them think more realistically and practically.

It also enhanced the students' skills in interacting with new environments, especially in multicultural contexts. Learning to respect and adapt to colleagues from different cultural backgrounds meant they they were more aware of understanding the company's work culture and supervisor characteristics to avoid violating the rules and principles during internships. It also provided real experience in interacting with government, superiors and/or customers and thereby improving their ability to communicate, think critically and understand the importance of the public or customer perception.

Consequently, Dr Muslihati made recommendations for improving the implementation of the industrial internship program for better outcomes for all stakeholders.



Ellie embarks on a PhD

Ellie Bock has been awarded a Masters degree after completing her Master of Philosophy (Society and Culture). Ellie's primary advisor was Professor Allan Dale and her secondary advisor was Professor Hurriyet Babacan. Her thesis was titled Prescient Custodians: Biocultural Ecological Economics and Restorative Governance of the Wet Tropics.

The Wet Tropics of Queensland World Heritage Area (WT WHA) is considered the 3rd most vulnerable of all protected areas on Earth to global warming impacts (Le Saout et al. 2013). Arguably this vulnerability continues to escalate as a result of pervasive neoliberal paradigms and increasing greenhouse gas emissions.

A limited understanding of ecological economics and biocultural concepts characterizes the Wet Tropics region, particularly as these relate to established Indigenous Protected Areas (IPAs) in this globally exceptional bioregion. WTWHA governance arrangements remained structurally little changed from their inception during the 1990s.

Ellie's MPhil thesis conceptualized leading practice governance arrangements for the WTWHA and its buffer. Two theoretical ideas framed the exploratory research: ecological economics (EE) and biocultural concepts. Primary data from a series of 12 in-depth semi-structured interviews provides new insights into regional stakeholders' exposure to, and understandings of, the study's theoretical concepts. Critical analysis evaluates the presence, absence or emergence of IPAs as a form of biocultural EE, with recommendations made to inform a WTWHA restorative governance agenda, and related policy intervention.

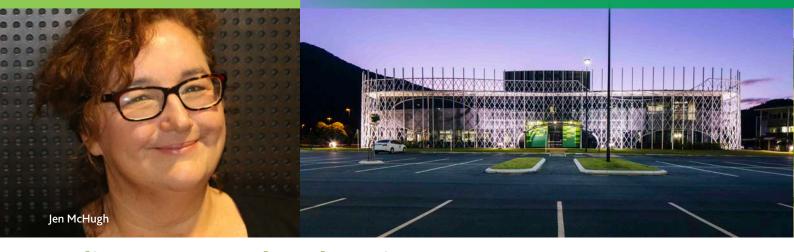


Having completed her Masters, Ellie successfully applied to be a PhD Candidate, with Allan Dale and Hurriyet Babacan continuing in their respective advisory capacities, together with Dr Kearrin Sims as additional secondary advisor.

Her PhD research aims to investigate culturally assured decision-making as actual and/or conceptual approaches toward a place-based restorative governance arising from biocultural EE.



Research in tropical societies



Indigenous Food and Business Expo

On November 16, the TNQ Drought Hub was pleased to support the Indigenous Food and Business Expo in Cairns. First Nations owned food and beverage and other businesses from throughout Queensland firmly placed culture and innovation front and centre at the inaugural Indigenous Food and Business Expo. In the lead up to the expo, the FNQ Food Incubator Hub delivered five workshops focussed on holding a profitable market stall and preparing stall holders, so they had excellent promotional material and plenty of product.



Image: Local Cairns artist Melanie Hava with her wares. Credit: Jen McHugh

There were over 50 amazing exhibitors selling beautiful artwork, delicious food and drinks, handmade jewellery and clothing, and so much more! The Expo was well attended with many taking it as an opportunity to find unique Christmas gifts.

Some of the stall holders included Sobah Beverages, Tribal Voice Connections, Lavis by Benita Williams, Gapirri Aboriginal Art, Beachtree Distilling Co. Sunshine Coast, Australian Gourmet Foodbank, and Dawul Wuru Aboriginal Corporation.



Following the Expo, an Indigenous Food Gathering brought together more than 30 stakeholders from the Indigenous Food Industry on November 17, for a round table discussion regarding the challenges and opportunities facing First Nations Foods.

Some of the key points that resulted from the roundtable include; (1) The need to define and regulate the First Nations Food

(2) The opportunity to explore methods to trace provenance and document the story and origin of each ingredient and product.

Industry with a certification and/or accreditation system.

(3) The need for a central, free to access, database of resources including contacts, programs, research completed to date, and a list of projects currently being undertaken that stakeholder can easily access.





Waiting with no time to wait

Young people are frequently relegated to a state of waiting; expected to passively absorb and learn an adult culture that actively damages the earth. Governments persist in relying on harmful fossil fuels, and corporations rake in profits while causing devastation to the climate and ecosystems. Nita writes "While politicians ignore their political voice, young people refuse to stand quietly by." Although young people have been a part of political movements throughout history, they are currently witnesses to a global-scale display of their environmental concern, demands for change, and deliberate solidarity.

Their distrust in politics has led to a new form of participation which political sociologist Sarah Pickard (2019) has labelled Do-It-Ourselves (DIO) Politics. The lack of doing by power holders has led young people to take on the challenge to do it themselves, both individually and collectively. They are not waiting to be heard but are screaming from the street corners.



Nita's research project, supervised by A/Prof Theresa Petray and Dr Ailie McDowall, allows her the privilege of listening to young people's voices amid the chaotic clatter surrounding the climate change crisis. She is interested in French sociologist Pierre Bourdieu's theory of practice (1984), investigating habitus and capital in a field to understand a person's action. Can this theory of practice be a theory of young people's activism? Is it young people's habitus, combined with their access to capital, in the field of politics that explains their action?

"Bourdieu's theory of practice is a useful tool in examining young people's activism. But evidence from my research project is pointing to the inclusion of a process of conscientisation, or critical consciousness, as per Brazilian educator and philosopher Paulo Freire (1970). When young people's knowledge of the crisis becomes transformative, they develop knowledge of their power and capacity to act. From this point, we can see the manifestation of young people's DIO politics."

"As an activist, and a mother of young activists, I feel young people's urgency. In interviews and at protests they have told me of their fears for the future, their disgust at being lied to on a structural and systemic level, and their hurt at not being taken seriously. They have also told me of the relief they discover when taking political action, and the comfort they feel in global collective solidarity.

And they have not lost hope. The time is now. There is no more time to wait."

Images courtesy of Nita Alexander

Industry Expert Series

The Tropical North Queensland Drought Resilience and Innovation Hub (TNQDRIH) has engaged with two leading industry experts Professor Roger Stone and Bob Shepherd to build a series of videos which will assist producers and industry professionals make future focussed business decisions. The series will explore our experts' careers, their wealth of knowledge and their demonstrated ability to provide specialist advice that empowers landowners and industry.

Professor Roger Stone is an Expert Meteorologist and Climatologist with over 35 years' experience in climate science and applications for drought preparedness and management systems, in Australia and globally. Bob Shepherd is an Extension Expert in the Agricultural Sector. Bob reflects on how he got his start in the Ag Sector and the study and career opportunities that followed, he talks about his 30 years in beef extension and the challenges and opportunities for land holders.

The series introductory videos are now available at: https://www.tnqdroughthub.com.au/

For more information, email jane.oorschot1@jcu.edu.au









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What's happening in the Institute?

Details for these events can be found at: www.cairnsinstitute.jcu.edu.au/upcoming-events/

Event	Date & location
Falling From The Sky Exhibition Blue Humanities Lab A/Prof Robyn Glade-Wright	5 May The Cairns Institute
Interdisciplinary Symposium: Environmental Communication, Science Inspired, and Arts Delivered Video-linked to Bebegu Yumba and online A/Prof Robyn Glade-Wright	5 May Crowther Theatre
Social Science For The Reef Symposium Social Science Community for the Reef Dr Maxine Newland	11 September Cairns



What's happening in the Institute?

FALLING FROM THE SKY

The Cairns Institute | Lux Gallery | JCU Library

MAY 5 - JUN 7



Artists: Lynnette Griffiths and Marion Gaemers Title Curtain Fragment 5. 2023 245 x 184 cms Materials: Ghost net and beach rope.

Exhibition information: robyn.gladewright@jcu.edu.au