Eighth Biennial K'gari Conference Community, Culture and Collaborations

Saturday, 31st August 2019

University of the Sunshine Coast Fraser Coast Campus Hervey Bay









Sponsored by











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The Fraser Island Defenders Organization – The watchdog of Fraser Island

FIDO has a long history of campaigning achievements to protect one of the greatest natural wonders of the world. FIDO's aim has always been "to ensure the wisest use of the natural resources of Fraser Island".

FIDO was formed in January 1971, by voluntary conservationists from Maryborough, Hervey Bay and Bundaberg to oppose sandmining applications by the American Dillingham company and Murphyores on Fraser Island. Murphyores and Queensland Titanium Mines had obtained very extensive mining leases in the early 1960s without any protest, before the voluntary conservation movement had become organised, but there was widespread public opposition to proposals to extend leases and start mining on Fraser Island.

The late Dr. John Sinclair AO fought to protect K'gari for decades and led countless FIDO initiatives. https://fido.org.au/

A Logo for Fraser Island

The logo shows the island topography rising from the Pacific Ocean in the East (right) to the centre of the island where the tallest forest grows. It also shows a thin layer of "B" horizon starting close to the surface and getting progressively thicker and deeper as the soil profile ages and the nutrients are leached ever deeper under the overlying "A" horizon.

The forest develops from a coastal scrub to the rainforest climax and then the canopy gets lower through retrogressive plant succession as the dunes age. In general, the youngest soil profiles are in the east and the oldest soil with the deepest soil profiles are found on the western side of the island. This progressive and retrogressive plant succession then is based on the concentration of plant nutrients in the "B" horizon of the soil and how deep in the soil profile the "B" horizon occurs. After the climax is reached in the rainforest, while the "B" horizon continues getting richer it is driven ever deeper into the soil profile and is so deep that even the roots of the largest trees can't access it. The stature of the trees begins to diminish and the forest degenerates into a depauperate heathland, mallee and stunted scribbly gum forest.



Galangoor djali! Galangoor. Butchulla bilam, midiru K'gari galangoor nyin djaa. Ngalmu galangoor Biral and Biralgan bula nyin djali! Wanya nyin yangu, wanai djinang djaa.

Narawi (Joyce Bonner) and Uncle Mackie Burns

'Good day. Welcome! Butchulla people, Traditional Owners of K'gari, welcome you to country. May all our good spirits be around you throughout the day. Wherever you go leave only footprints.'

Community

At the close of the previous K'gari Conference "Time, Tide and Tourism" in 2017, it became clear that the next conference would reflect the desire to work together and continue to deliver a program that showcases the many groups caring for K'gari. With John Sinclair's title and rough outline, a variety of topics are on offer today because of his vision. We hope the day encourages continued action and enquiry into protecting and learning about this paradise, drawing on the community's guidance and initiatives. This conference was planned from the beginning as a partnership between FIDO and the Native Title holders of K'gari, the Butchulla People. We have much to celebrate in this joint venture.

Culture

Culture is about how people live life. In this session we will focus on K'gari voices through presentations that examine indigenous culture and engage us in deeper conversations.

Collaborations

Working together in some form touches just about every aspect of our lives. The four speakers in this session will not only tell us about their projects but reveal how they engage with others and, we hope, spark interest in further research and wider participation. Our vision is that healthy partnerships will continue to grow within and between groups as a result of this conference.

Sponsors

The Eighth Biennial K'gari Conference has been jointly organized by FIDO, the Butchulla Aboriginal Corporation and the University of the Sunshine Coast. Special thanks go to Mellissa Foley, Dr. Kim Walker and Jade Gould for their ongoing assistance in delivering the content of the conference.

We have also gratefully received sponsorship from:

The Queensland State Government

Fraser Coast Regional Council

The University of the Sunshine Coast

Kingfisher Bay Resort

Pacific Whale Foundation

The Spirit of Hervey Bay

Wildlife Queensland

We thank all the volunteers who are helping today. Your generous participation through stalls, posters and engagement is invaluable.

Ways of interacting

Be respectful

Each person has their own beliefs and values.

Value diversity

Each person has their own world views, experiences and opinions.

Listen politely

Each person has a right to contribute without pressure or intimidation.

Act with honour and courage

Be brave in sharing experiences, ideas and opinions.

Appreciate privacy

Each person has the right to uphold their privacy.

Act responsibly

Share feedback with thoughtful consideration and a positive attitude

towards others.

Based on resources from $\,$ sbs.com.au/learn/naidoc

Timetable

Session 1: Community 9.00 - 10.45am Chairperson: Veronica Bird (BAC) Welcome to Country **Joyce Bonner** - Elder 9:05

- 9:10 Video Message Hon Leeanne Enoch introduced by Lyn Wallace
- 9:20 Welcome to the Fraser Coast Mayor George Seymour
- 9:30 Conference History Keith Sinclair
- 9:35 Keynote Speakers Steve Biddulph Growing up and the Wild
- 10:15 All Roads Lead to Takky Wooroo Dr Fiona Foley

Morning Tea 10:45 – 11:00

Session 2: Culture 11.00am - 12.45pm **Chairperson: Jade Gould (BAC)**

- 11:00 Introduction Mayor George Seymour
- 11:05 Storylines Christine Royan
- 11:25 Reading between the lines: Uncovering Butchulla History in the K'gari Research Archive Rose Barrowcliffe
- 11:45 Poverty in Paradise Rowan Foley
- 12:05 Dune Systems on K'gari and the Cultural Timeline Prof. Jamie Shulmeister

Lunch 12:45 - 1:30

Session 3: Collaborations 1.30 - 3.00pm **Chairperson: Sue Sargent** (FINIA)

- 1:30 Bitou Bush eradication on K'gari, Biosecurity Dr. lan Muirhead
- 1:50 Cooloola BioBlitz: A Citizen Science Approach to Mapping Biodiversity **Dr. Lindy Orwin**
- 2:05 Decoding Human - Dingo Conflict on K'gari: Dr. Bradley Smith
- 2:35 A Baseline genetic analysis of the K'gari Dingo Population Dr. Gabriel Conroy

Tea break 3:05 - 3:25

Session 4: Open Community Forum 3.30 - 5.00pm Chairperson: Prof. Tim Wess (USC)

This session will operate along the lines of the ABC's Q&A with members of the audience invited to submit their questions to the panel.

Panellists: Steve Biddulph, Lyn Wallace, Dr. Ian McNiven, Dr. Bradley Smith, Veronica Bird, Jade Gould, Linda Behrendorff, Dr. Kim Walker, Peter Shooter, Colin Zemek

4:55 Vote of Thanks and door prizes drawn

Session One: COMMUNITY (9:00 - 10:45)

Lecture Theater (Room FC B1.04) Chairperson: Veronica Bird

9:05 Welcome to Country by Joyce Bonner, Butchulla Elder



Joyce Bonner, Butchulla Elder and founder of Nyanga Baranga Barangam (Look, listen, learn/know) Butchulla Language Program works with CQID Central Queensland Indigenous Development at the Fraser Coast as a Family Wellbeing Officer. She holds a BA in Language Studies and Diploma of Indigenous Education.

9:10 Conference Opening (video message), **The Honorable Leeanne Enoch** introduced by Lyn Wallace

The Honourable Leeanne Enoch, Minister for Environment and the Great Barrier Reef, Minister for Science and Minister for the Arts since 12 Dec 2017





Lyn Wallace is the Manager of the World Heritage Unit within the Partnerships Branch of the Department of Environment and Science. Lyn has over 30 years of experience in working in protected area management and conservation. She has gained most of her experience working in Far North Queensland. Lyn joined the World Heritage Unit in January 2019, after almost a decade of working on protected area establishment on Cape York Peninsula.

9:20 Welcome to the Fraser Coast Mayor George Seymour

George Seymour was elected Fraser Coast Mayor in May 2018, after serving for six years as the Division 10 (Urangan) Councillor. Cr Seymour worked as a solicitor, a disability support worker and ran the region's youth homeless shelter prior to his election to Council. An avid historian, he researches and writes about history, architecture, literature and presents regular talks at Fraser Coast libraries. He is actively involved with local historical groups and is the chairperson of several heritage related bodies. He is a volunteer solicitor with a community legal service and a member of several boards. His goal as Mayor is to ensure the Fraser Coast is a vibrant, healthy and active community.



9:30 Conference History Keith Sinclair



Professionally **Keith Sinclair** is a software designer and developer, having designed and built systems for ASIC, Australia Post, Cisco, Macquarie Bank. He was the author of a long term Open-Source project NMIS and has been awarded several patents.

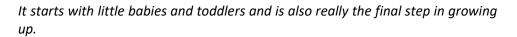
Keith helped his father John Sinclair in his Eco Tourism business and supported his conservation work with FIDO resulting in a fascination with science. Most recently this collision has seen the development of the K'gari Weather Station Network, which monitors weather and the differences in rainfall on different parts of the island.

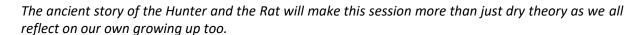
9:35 Keynote Speakers Steve Biddulph Growing up and the Wild

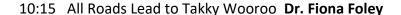
Steve Biddulph AM is one of the world's best-known parent educators. A psychologist for 35 years, he is now retired but continues to write and teach and learn. His books, including <u>Raising Boys</u> and <u>The New Manhood</u> and <u>Raising Girls</u>, are in four million homes and 31 languages. But it's for his live talks that he is best known. Many people express surprise at how moving and emotional they are, as well as how much fun.

Growing up and the Wild

Kids need to be helped to bond with wild nature, if they are to feel really at home in the world.









Dr. Foley is from the Wondunna clan of the Badtjala nation. She completed her PhD at Griffith University in 2017. The thesis topic examined Queensland's legislation, *The Aboriginals Protection and Restriction of the Sale of Opium Act, 1897*. Her new work on this subject was received with significant interest. As a visual artist, she exhibits regularly in Australia and internationally. Dr Foley is currently a Postdoctoral Fellow with Queensland College of Art, Griffith University.

Morning Tea Upstairs 10:45-11:00



Session Two: CULTURE (11:00 – 12:45)

Lecture Theater (Room FC B1.04) Chairperson: Jade Gould (BAC)

11:00 Introduction Mayor George Seymour

11:05 Storylines Christine Royan



Christine Royan, Director of Cultural Pathways, has been involved with Aboriginal Native Title Claims and Future Acts Agreements being negotiated by the native title claimants under the Native Title Act. For more than 15 years she has worked professionally on the intricacies of Native Title and Cultural Heritage. As Director of the *Butchulla Aboriginal Corporation RNTBC* she has spent the last five years working with her people.

11:25 Reading between the lines: Uncovering Butchulla History in the K'gari Research Archive Rose Barrowcliffe

Rose Barrowcliffe is a Butchulla researcher undertaking a Higher Degree by Research at the University of the Sunshine Coast, working on the K'gari Research Archive which was founded on John Sinclair's personal collection. The research aims to highlight the stories of the Butchulla people in the K'gari Archive and identify ways to include previously unrecorded Butchulla histories, preserving their vital role in the history of the island and Wide Bay. Rose has also assisted in other K'gari projects including a recent all-female UQ, University of Melbourne, Flinders University and University of Western Australia research trip on the landforms around Moon Point.



11:45 Poverty in Paradise Rowan Foley



Rowan Foley comes from the Wondunna clan of the Badtjala people, Traditional Owners of K'gari. He is the founding CEO of the Aboriginal Carbon Foundation (AbCF), a not for profit company, and Managing Director of the Reducing Carbon Building Communities Fund Pty Ltd.

He has worked as a ranger and later Park Manager at Uluru – Kata Tjuta National Park living in the Mutitjulu community. His skills have taken him to Western Australia and overseas. Rowan lives with his family, dog and horses in Alice Springs NT.

12:05 Dune Systems on K'gari and the Cultural Timeline

Prof. Jamie Shulmeister

Prof. Shulmeister is the Chair of the Scientific Advisory Committee of the Fraser Island (K'gari) World Heritage Area. He is a professor of Geomorphology and Quaternary Science at the University of Queensland and leads a large project looking at the environmental history of K'gari and Cooloola.



Lunch 12:45 -1:30 (Please feel free to peruse the posters and displays on the upper level)

Session Three: COLLABORATIONS (1:30 – 3:00)

Seminar Room (Room FC C2.09) Chairperson: Sue Sargent (FINIA)

1:30 Bitou Bush eradication on K'gari, Biosecurity Dr. lan Muirhead



Dr. Ian Muirhead is a retired plant pathologist who has worked with diseases of plants as a research scientist, regulator, manager and consultant with state departments, primary industry bodies, universities and Cooperative Research Centres. His work originally centred on horticultural crops including bananas, avocados and mangos but broadened into biosecurity issues in general. A visitor to K'gari for the last forty years, he was introduced to the Sandy Cape Park Ranger volunteer weed control program which led to an association with the Bitou Weed Control Program between Biosecurity Queensland and the Parks and Wildlife Service. A paper on progress towards eradication has recently been published.

1:50 Cooloola BioBlitz: A Citizen Science Approach to Mapping Biodiversity Dr. Lindy Orwin

Dr. Lindy Orwin is the Coordinator of Cooloola Coastcare, based in Rainbow Beach, and an Honorary Research Fellow at the University of Southern Queensland's Institute for Resilient Regions. She has received many awards and has been contracted by various organisations to work on short- and long-term projects. She is a qualitative researcher with experience in Action and Design Based Research. She is the convenor of the Cooloola BioBlitz, an annual event run in conjunction with the FIDO to map the biodiversity of the Cooloola Region.



2:05 Decoding Human - Dingo Conflict on K'gari Dr. Bradley Smith



Dr. Bradley Smith is a Senior Lecturer in psychology at Central Queensland University, Adelaide Campus. He researches animal cognition and behaviour (particularly of the dingo), the human dimensions of wildlife, and the intersection between humans and animals more broadly. In 2015 he authored The Dingo Debate, a book exploring the story of Australia's most controversial animal. Dr Smith has over 60 publications. He is a member of the CQU Animal Ethics Committee, on the editorial advisory board Anthrozoos, Director of the Australian Dingo Foundation, and an Adjunct Senior Lecturer at the University of Adelaide (School of Veterinary Science).

2:35 A Baseline genetic analysis of the K'gari Dingo Population Dr. Gabriel Conroy

Dr Gabriel Conroy is the Environmental Management Program Coordinator at USC. His research focuses on conservation biology, with an emphasis on ecological genetics and threatened species management. He is the founder of the Australia Zoo/USC DNA Bank and is currently working on projects relating to threatened rainforest plants, Glossy-Black Cockatoos and legless lizards. The K'gari dingo population has become a focal point of Gabriel's research, including a pilot scatbased mark-recapture population estimate study, alongside a baseline genetic analysis of K'gari dingoes. He is also working with international and domestic collaborators on a project relating to the evolutionary history of dingoes.



Tea Break (3:05 - 3:25)

Session Four: OPEN COMMUNITY FORUM (3:30 – 5:00)

Seminar Room (Room FC C2.09) Chair: Prof. Tim Wess

Panellists: Steve Biddulph, Lyn Wallace, Dr. Ian McNiven, Dr. Bradley Smith, Veronica Bird, Jade Gould, Linda Behrendorff, Dr. Kim Walker, Peter Shooter, Colin Zemek



Linda Behrendorff has spent 19 years working for QPWS in a range of fields including threatened species, fire and pest species management. She has a passion for conservation of threatened species and protected areas. She enjoys working with external groups and has been an active contributor in fostering long-standing collaborative relationships and caring for country. She contributes to community forums, public workshops and popular articles and scientific publications on her work.

Peter Shooter is a life-long environmental activist and the newly elected president of FIDO, which he also represents on the Fraser Island World Heritage Community Advisory Committee. Peter trained as a horticulturist and worked for Queensland Department of Primary Industries, CSIRO and with town planners vegetating a new mining town, Leigh Creek South, in far north South Australia. He went on to be a Union official, Assistant Secretary of the Labor Party and a Senior Policy Advisor to two Queensland Ministers for the Environment and Premiers Beattie and Bligh.





Dr. Ian McNiven is an anthropological archaeologist with the Centre of Excellence for Australian Biodiversity and Heritage, Monash Indigenous Studies Centre, Monash University. He specialises in Aboriginal and Torres Strait Islander coastal societies with a research focus on ritual and spiritual relationships with the sea. For over 30 years, he has worked with the Butchulla on documenting, researching, and protecting cultural heritage sites on K'gari.

Dr. Kim Walker is an Adjunct Associate Professor in environmental education at the University of the Sunshine Coast. Her work involves the promotion of USC's Research and Learning Centre at Dilli Village, K'gari. She convened the 2018 K'gari Symposium, also held here at the Fraser Coast Campus. Her background is in sustainability in higher education and environmental education in schools. She is a member of the Fraser Island World Heritage Community Advisory Committee, and a past president of the Australian Association for Environmental Education.





Colin Zemek, Fraser Coast Regional Council Biosecurity
Coordinator, develops and implements a pest (plant and animal) Biosecurity plan
for the region. He liaises with community groups that have interests in K'gari. His
2-person Biosecurity Officer team surveys township properties and seeks
assistance from landowners to remove invasive pests, using compliance
enforcement when needed. His operational team of 5 treat pest plants on the
Council road system across K'gari. They also assist Biosecurity Queensland and
QPWS in searching for Bitou bush infestations on the southern end of island.

4:55 Vote of Thanks and Door prizes

Session Chairpersons

Veronica Bird is a current Board Member of the Butchulla Aboriginal Corporation, Member of the Wide Bay Hospital Health Service, Youth Justice Council and works as the Community Development Practitioner with Central Queensland Indigenous Development, Fraser Coast. She is an accomplished Indigenous Affairs professional with over 40 years' experience in policy, administration and community liaison across all levels of government. She excels in driving Indigenous Affairs, whilst working in collaboration with stakeholders to deliver practical solutions.





Jade Gould grew up on Butchulla Country learning to care for the land. To bridge the gap between traditional knowledge and western science, she completed a Bachelor of Science in 2015 and a Master's degree this year. As a Director in the BAC, her portfolio includes building and maintaining relationships with FIDO and FINIA. Her work for the Murray Darling Basin focuses on incorporating First Nations environmental watering objectives into environmental watering planning. In 2015, she represented her mob at conservation conferences in Hawaii and Morocco.

Sue Sargent is a marine scientist and educator based in the Wide Bay. She is the Chair of the Fraser Island Natural Integrity Alliance (FINIA) a collaboration of government, non-government and community partners who all work to protect and restore K'gari's natural and cultural integrity. She also chairs the Fraser Island World Heritage Area Community Advisory Committee and recently completed a 5-year term as the Chair of the Australian World Heritage Advisory Committee (AWHAC). She is passionate about community and collaboration and supports a very healthy network of volunteers and contributors.





Professor Tim Wess is Deputy Vice-Chancellor (Academic), University of the Sunshine Coast. Prof Wess's background is in science. Social justice and equity have been strong components of his work in and beyond the higher education sector. He also has a Graduate Certificate in Wiradjuri Language and Nation Building (CSU 2015), and in 2017 became a Principal Fellow of the Higher Education Academy (HEA), which recognised his work on inclusivity in higher education.

Recently he has studied the change of biomaterials in the context of cultural heritage and archaeological research and approaches to Indigenous inclusivity in academia.

Posters and Displays

Zela Bisset: Protecting Paradise: Fifty years in service to K'gari. John Sinclair's life and legacy

Lesley and Don Bradley: Sandy Cape Lighthouse Conservation Association & turtle relocation

Chris Breitenbach: Happy Valley Bush Regeneration

Fiona Hawthorne: Cooloola Coastcare projects and citizen science participation

Ron Johnstone: Hydrodynamics and materials transport in the Mary Valley river estuary: An initial

assessment

Kath Nash: Mary River Catchment Coordinating Committee display

Dan Novak and Jenna Tapply: Wongari information station QPWS

Ros Waldron: Sustainable transport options on K'gari

Suzanne Wilson: Best practices in native plant propagation for K'gari ecosystem regeneration

Maria Zann: Applying an attribute-based classification scheme to understand the seascape-scale

intertidal and subtidal ecosystems of the Central Queensland (CQ) Coast

The Butchulla Aboriginal Corporation

The Butchulla Aboriginal Corporation RNTBC (ICN8107) was established in late 2014 when the Federal Court of Australia handed down a determination that recognizes the Butchulla people's non-exclusive native title rights and interests over Fraser Island. The corporation currently has seven directors.

The Butchulla people's vision statement

We have owned this land since creation.

We have never given up country.

We have never sold this land.

The tides of history have not changed our laws.

We have never surrendered our rights to this land.

We want to see our country healthy.

We want to see our children strong and healthy on country.

We want to see our people strong, respected and with a sustainable future on this land.

We want to see our lakes, sands, waterholes, creeks, trees, fish and animals healthy.

We want to see our country looking beautiful like it was when K'gari laid down to rest.

We welcome visitors to our country.

We want them to acknowledge this land and our old people who care for this country and keep an eye over the place.

We want them to respect and care for this land like we do.

We don't want it to be run down, overused and broken or 'buggered up'.

All we want to see is only your footprints, nothing else!

We want to make sure we leave our children with their legacy and the right keys to this place.

We want them to understand who they are and where they belong.

http://www.oric.gov.au/print/publications/spotlight/paradise-regained

Fraser Island Natural Integrity Alliance (FINIA)

FINIA is a community-based partnership dedicated to the protection of Fraser Island World Heritage Area / K'gari's natural integrity, ecological assets and unique beauty through collaborative management, community education and targeted rehabilitation works.

The Fraser Island Natural Integrity Alliance (FINIA) was formed after the Fraser Island Weeds and Pests Workshop in late 2005. The members of FINIA decided to collaborate on a number of issues that were threatening the future sustainability of the World Heritage Area's natural environment. The Alliance brings stakeholders together to implement and achieve common goals, respecting differing organisational objectives, in a proactive and respectful manner.

FINIA is successful because it works in co-operation with the Island's land managers, conservation groups and traditional custodians (the Butchulla people).

Volunteering with FINIA provides a unique opportunity to contribute to the protection of the internationally significant Fraser Island World Heritage Area. Fraser Island is the largest sand island in the world with over 250km of sandy beaches, 40km of coloured sand cliffs, half the world's perched lakes, tall rainforest and the world's largest unconfined aquifer on a sand island.

Membership is open to all that are committed to supporting the objective of FINIA.

Member Organisations:

- Department of Environment and Science Queensland Parks & Wildlife Service (QPWS)
- The Butchulla Aboriginal Corporation (traditional custodians of K'gari)
- Burnett Mary Regional Group (BMRG)
- Fraser Coast Regional Council (FCRC)
- University of the Sunshine Coast (USC)
- Fraser Island Defenders Organisation (FIDO)
- National Parks Association of Queensland (NPAQ)
- Fraser Island Association (FIA)
- Sandy Cape Lighthouse Conservation Association (SCLCA)
- Lower Mary River Land and Catchment Care Group (LMRLCCG)
- Conservation Volunteers Australia (CVA)
- Cooloola Coastcare Association Incorporated (CCAI)
- > Fauna & Flora International Australia (FFI)
- Orchid Beach Progress Association
- Wide Bay Burnett Environment Council.

Volunteering: It isn't necessary to be a member to participate and there are lots of opportunities to participate in FINIA activities throughout the year.

For more information or to contact us, please log onto www.finia.org.au

Statement of Outstanding Universal Value





Fraser Island



Commonwealth Government Department of Environment Web page

Brief Synthesis

Fraser Island, also known by its Aboriginal name of K'gari, lies along the eastern coast of Australia. The property covers 181,851 hectares and includes all of Fraser Island and several small islands off the island's west coast. It is the world's largest sand island, offering an outstanding example of ongoing biological, hydrological and geomorphological processes. The development of rainforest vegetation on coastal dune systems at the scale found on Fraser Island is unique, plus the island boasts the world's largest unconfined aquifer on a sand island. The property has exceptional natural beauty with over 250 kilometres of clear sandy beaches with long, uninterrupted sweeps of ocean beach, strikingly coloured sand cliffs, and spectacular blowouts. Inland from the beach are majestic remnants of tall rainforest growing on sandy dunes and half of the world's perched freshwater dune lakes.

Criterion (vii): Fraser Island is the largest sand island in the world, containing a diverse range of features that are of exceptional natural beauty. The area has over 250 kilometres of clear sandy beaches with long, uninterrupted sweeps of ocean beach, including more than 40 kilometres of strikingly coloured sand cliffs, as well as spectacular blowouts.

Inland from the beach are majestic remnants of tall rainforest rowing on tall sand dunes, a phenomenon believed to be unique in the world. Half of the world's perched freshwater dune lakes occur on the island, producing a spectacular and varied landscape. The world's largest unconfined aquifer on a sand island has also been found here.

Criterion (viii): The property represents an outstanding example of significant ongoing geological processes including longshore drift. The immense sand dunes are part of the longest and most complete age sequence of coastal dune systems in the world and are still evolving. The superimposition of active parabolic dunes on remnants of older dunes deposited during periods of low sea level, which are stabilised by towering rainforests at elevations of up to 240 metres, is considered unique. Fraser Island also has a variety of freshwater dune lakes which are exceptional in terms of number, diversity and age. The dynamic interrelationship between the coastal dune sand mass, aquifer hydrology and the freshwater dune lakes provides a sequence of lake formation both spatially and temporally.

The process of soil formation on the island is also unique, since as a result of the successive overlaying of dune systems, a chronosequence of podzol development from the younger dune systems on the east to the oldest systems on the west change from rudimentary profiles less than 0.5 metres thick to giant forms more than 25 metres thick. The latter far exceeds known depths of podzols anywhere else in the world and has a direct influence on plant succession, with the older dune systems causing retrogressive succession when the soil horizon becomes too deep to provide nutrition for tall forest species.

Criterion (ix): The property represents an outstanding example of significant ongoing biological processes. These processes, acting on a sand medium, include biological adaptation (such as unusual rainforest succession), and biological evolution (such as the development of rare and biogeographically significant species of plants and animals).

Vegetation associations and succession represented on Fraser Island display an unusual level of complexity, with major changes in floristic and structural composition occurring over very short distances. Both heathland and closed forest communities provide refugia for relict and disjunct populations, which are important to ongoing speciation and radiation. Evolution and specialized adaptation to low fertility, fire, waterlogging and aridity is continuing in the ancient angiosperm flora of the heathlands and the associated vertebrate and invertebrate fauna. Since listing, patterned fens have been discovered on the property, which along with those at Cooloola, are the only known examples of sub-tropical patterned fens in the world. These fens support an unusual number of rare and threatened invertebrate and vertebrate species.

The dynamic interrelationship between the coastal dune sand mass, hydrology, the ongoing processes of soil formation and the development of plant communities is remarkable in its scale and complexity given the uniform substrate. In particular, the development of rainforest vegetation communities, with trees up to 50 metres tall

on coastal dune systems at the scale found on Fraser Island, is not known to occur elsewhere in the world. There is clear zonation and succession of plant communities according to salinity, water table, age and nutrient status of dune sands, exposure and fire frequency. The low shrubby heaths (wallum) are of considerable evolutionary and ecological significance. Fauna including a number of threatened species of frog, have adapted to the highly specialized acidic environment associated with wet heathlands and sedgelands in this siliceous sand environment.

Integrity

The property includes all of Fraser Island and a number of small adjacent islands off the west coast including Stewart and Dream Islands covering an area of 181,851 hectares. The boundary of the property extends 500 meters seaward from high water mark around Fraser Island and the smaller islands. The majority of Fraser Island is National Park, and all of the marine area within the property lies within Great Sandy Marine Park. A small area of private land on the island is managed to ensure the property's values are maintained.

The conditions of integrity are met as there is no perceptible human threat to longshore drift and other ongoing processes that make this area outstanding. The property is sufficiently large, diverse and free from disturbance to contain all ecosystem components required for viable populations of all species and for continued maintenance of all-natural phenomena. For example, the evolution of soil profiles remains essentially undisturbed. Weeds, plant diseases and feral animals are present but in low numbers and are subject to active management. Disjunct and relict populations of flora and fauna, including those associated with the lakes and creeks, have remained intact and will continue to be important for ongoing speciation. While the tall forests have been affected to some extent by logging, this practice has stopped, and the forests have the capacity to return to their former grandeur.

http://www.environment.gov.au/heritage/places/world/fraser-island

History of Biennial Fraser Island Conferences

Fraser Island is a World Heritage site that warrants ongoing monitoring because of its Outstanding Universal Value and fragility. It is a natural laboratory for a wide range of environmental studies. The results of those studies undertaken need to be communicated to the public because better appreciation fosters better care and management. That has remained FIDO's objective in continuing to organize these conferences.

8th 2019 Community, Culture & Collaborations, USC, Fraser Coast Campus

7th 2017 Time Tide & Tourism, University of the Sunshine Coast

6th 2015 Sand Sea and Sun, University Sunshine Coast Sippy Downs

5th 2013 A Natural Laboratory, Mt Coot-tha

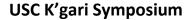
4th 2011 FIDO at 40, Walkabout Creek the Gap

3rd 2009 Shifting Sands, Walkabout Creek the Gap

2nd 2007 True Grit, University Sunshine Coast Sippy Downs

1st 2004 Fraser Island 20-20 Vision, Noosa

It is proposed that the Ninth Biennial Fraser Island Conference in 2021 will be based around a theme of *Research Respect Recreation - a Retrospective* (RRR).



The University of the Sunshine Coast held the first Symposium here at the Fraser Coast campus, 7-8 June 2018.

https://www.usc.edu.au/explore/usc-news-exchange/news-archive/2018/may/symposium-to-put-focus-on-world-heritage-icon#

It is envisaged that the next Symposium be held in 2020 and will continue to examine the role of research on K'gari, a World Heritage Icon.





Notes:

(Make a copy of your question for the Q & A Forum in session four here)

Fraser Island Recreation Area map

Great Sandy National Park

