



MOONBI 138

MOONBI is the name given by the Butchulla Aborigines to the central part of their homeland, Fraser Island or “K’gari”

MOONBI is the newsletter of Fraser Island Defenders Organization Limited

FIDO, “The Watchdog of Fraser Island”, aims to ensure the wisest use of Fraser Island’s natural resources

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Since MOONBI 137

Changing political Scene: Since the last MOONBI there has been a new Morrison government installed in Canberra. The new Environment Minister is Hon. Melissa Price who was on K’gari in April for the 25th World Heritage Anniversary. While FIDO doesn’t anticipate any immediate change in the Commonwealth Government’s paltry contribution to manage K’gari, it is hoped that Prince Harry’s raising awareness on the need to protect the Queen’s Commonwealth Canopy for indigenous forests might prick the political consciousness of some Canberra monarchists. K’gari is only one of two sites in Australia where Queen’s Canopy title has been bestowed.

Cooloola an overlooked World Heritage site: For too long Cooloola that should have been inscribed with K’gari in 1992 has been denied its deserved World Heritage ranking. FIDO is urging that this be given a higher priority. (p2)

Citizen Science: There is much to be learned from BioBlitzs as FIDO discovered when reviewing the data from the 2016 BioBlitz (p2)

Cooloola BioBlitz: FIDO and Cooloola Coastcare earned deserved bragging rights over the august Cooloola BioBlitz. This event generated a huge public interest and was extremely significant in promoting public awareness of many critters that previously had no “sex appeal” in the public eye such as spiders and tiny moths. Included is a long report on the BioBlitz and its outcomes. With government funding for environmental research and protection, it is necessary that FIDO encourages more citizen science and volunteer effort to overcome the misplaced political thinking that the environment is an impediment to economic growth. (pp3&4)

Maintaining the Natural Integrity: FIDO is concerned that the QPWS responsible for protecting Nature in Queensland is being seduced into a “Tidy up mentality”, that is progressively destroying natural habitat. See p6 where there is a story on the manual and biological control of lantana on K’gari.

Queen’s Commonwealth Canopy: The impact of Prince Harry’s visit with its focus on the forests of K’gari may help ensure that a greater proportion of resources is directed to natural resource management (including forest protection) on the island. However the government focus has been on how many more visitors will be encouraged to K’gari following the visit of Prince Harry and Megan Markle. See story p7.

Colton Coal Mine: The proponents of digging a 50 metre deep open cut pit that will need to discharge 946 megalitres into the nearby Mary River are now having second thoughts based largely on economic considerations. See p8

Research and Conferences: 2019 is shaping up to have a significant impact on K’gari and how to manage the Great Sandy into the future. Positive progress is being made on two research projects that FIDO is helping to fund. Field work is now happening for Great Sandy Strait and the environmental impact of existing roads. Two very significant conferences are also being planned—an Australian Biosphere Conference in Maryborough in March and the Community, Culture and Collaborations Conference in Hervey Bay on 31 August. Details of our revised volunteer program are also foreshadowed on pages 8 and 9.

FIDO on Facebook: FIDO’s Facebook page is now managed by Suzanne Wilson. It continues to gain popular appeal. A recent post attracted over 1100 “likes”.

FIDO’s K’gari E-Newsletters: FIDO has a comprehensive array of data on our web site www.fido.org.au If you aren’t already receiving updates of developments through our E-Newsletters, please notify john@fido.org.au

Backgrounders: Backgrounder 83 Attempts to define the conflicts that determine how we view Nature. (An example of how the obsession with tidiness needlessly destroyed Nature on K’gari is given on p 6.) The other Backgrounder with this issue (No 87) elaborates on the seriousness of the threat to K’gari’s forests and ecology from Myrtle Rust



The Cooloola BioBlitz attracted 80 participants aged from 8 to 81. Here the youngest participant is doing a stand-up interview for WIN TV in Cooloola rainforest at Bymien. (Story p2-5)

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Recognizing Cooloola — an overlooked World Heritage site

Commissioner Tony Fitzgerald recommended the whole of the Great Sandy Region for World Heritage listing after an extensive inquiry in 1992. This was fully supported by the Queensland Government that prepared the nomination on that basis. In the negotiations between the Australian Government during 1992, the area that was to be given World Heritage status was whittled down to just Fraser Island even though much of the main justification for inclusion was established by research in Cooloola and only inferred to occur on K'gari.

The most unfair omission of Cooloola has rankled FIDO and Queensland scientists for 26 years. FIDO has been determined to correct this miscarriage ever since. We even discussed the matter with Australia's ambassador to UNESCO and former Australian Prime Minister, Hon. Gough Whitlam. Acting on his sage advice FIDO waited diplomatically some years before the matter could be formally raised again.

Scientists on the Fraser Island World Heritage Advisory Committee were as aggrieved as FIDO at the omission of Cooloola from World Heritage listing and agitated for years. Eventually in 1998 the Queensland Government agreed to commission an assessment of Cooloola's Outstanding Universal Value. This was done through 1999 with a review of all known data and research, and a colloquium when all of the leading contributors met in Brisbane. Under the guidance of the then Chair of the IUCN's World Commission on Protected Areas, Bing Lucas, the scientists examined all of the evidence and unanimously agreed that Cooloola met all for criteria for being inscribed as a Natural World Heritage site.

In the years since then, the renomination of Cooloola again languished due either to political indifference at the State or Federal level or to bureaucratic sloth.

Since both the States and the Federal Government agreed to advance Cooloola's nomination and have it placed on the Tentative World Heritage List in 2010, the snail's pace progress continues. Accepting the informal political and bureaucratic rules, it seems unlikely that Cooloola and other critical areas of the Great Sandy Region, particularly Great Sandy Strait will be inscribed before 2021.



The Cooloola BioBlitz

One of FIDO's proudest more recent initiatives has been to engage more actively in citizen science. The nexus between environmental volunteering and citizen science is very strong. This grew out of our role in bush regeneration where we needed to understand the ecology of weeds and of the native plants they are competing with.

Another reason for FIDO's engaging in more citizen science is the result of the progressive diminution of government contribution to science and the environment in real terms. The priority given to environmental protection is woefully inadequate. If the governments won't accept their responsibilities we can help where possible through voluntary effort. If governments don't accept their responsibilities to advance science, then citizen scientists can augment the efforts of trained professional scientists by assisting where they are competent and managed.

This was the motive behind FIDO staging its first BioBlitz at Dilli Village in 2016. The work of keen naturalists in undertaking a stocktake of K'gari's biological resources was a brilliant initiative and it is still bearing fruit as we compare the data from the BioBlitz with earlier data. For example, there were 65 species of birds recorded at the November 2016 BioBlitz. FIDO has been able to compare this with a bird list compiled covering a similar area from October 1968.

Bird population changes: There were 22 species of birds listed in the 2016 list that didn't appear on the 1968 list. This meant that as many species appeared on the opposite list that weren't replicated. Some explanations are that it can be attributed to the luck of the day and the vigilance of the observers but there were a surprising number of rainforest species that weren't picked up during the BioBlitz even though Central Station was included in the 2016 study area. Another 8 species mainly birds of estuaries on the 1968 list were most likely observed along Great Sandy Strait that wasn't part of the 2016 BioBlitz study area.

Missing from the 2016 list were **Pipits** that were very common along the foreshore in 1968. That was when there was no Beach Spinifex on Fraser Island. There appears to be a connection between the Spinifex spread and the demise of pipits. **Silver Gulls** were once as rare as hens' teeth on the Ocean beach and didn't appear on the 1968 list. Other worrying species to appear on Fraser Island since 1968 were Indian Mynas and Spotted Turtledoves. The Indian Mynas only made their first appearance at Dilli Village just months before the BioBlitz. Conducting more regular and systematic BioBlitzes help improve our environmental understanding and management of the natural environment.

Unfortunately we can't obtain a permit to follow up the Beach to Birrabeen BioBlitz on K'gari. So a decision was made to hold a BioBlitz for Cooloola where we have a permit valid for three years. It was as a result of that and FIDO's collaboration with Cooloola Coastcare that has both raised the profile of citizen science and of Cooloola's World Heritage claim.

Summary Report of Cooloola Citizen Science BioBlitz

The Rainbow Beach based BioBlitz lured 15 experienced scientists and about 80 keen volunteers to scan the sky and treetops, and shake branches and grasses over August 24 to 26 to discover the unknown species of plants animals, birds and fish. But the issue that has grabbed national and international media attention has been the discovery of a variety of miniscule invertebrates from moths to spiders.

Ninety-seven people signed on for this first BioBlitz in Cooloola to document as much of the Cooloola area's living natural resources — plants, animals, invertebrate, fungi and more, as possible. Seven target areas were defined for close scrutiny and selected because they represented distinctive habitat types that were all easily accessible from Rainbow Beach, the administrative hub and centre of operations. The sites ranged from the mangrove forests of Bullock Point to the vegetation of Lake Poona perched in the high dunes; from the littoral forests of the Inskip Point Peninsula to the rainforest at Bymien; from the wallum heathlands to the eucalypt forests adjacent to Carlo Sandblow; and from the fens to Searys Creek. It is an extremely rich and diverse area all within 12 kilometres of Rainbow Beach and all accessible by conventional vehicles.

Surprisingly, there has been little documentation of the biological resources of an area that has already been included on the World Heritage Tentative List. Apart from the objective of building citizen science to better record essential base-line data, this exercise was also helping build the case to enable Cooloola to join its sister sandmass, K'gari (Fraser Island), across the Great Sandy Strait as a fully recognized part of the Natural World Heritage.

The BioBlitz was the result of a very collaborative partnership between the Fraser Island Defenders Organisation (FIDO) that organized its first BioBlitz at Dilli Village in 2016 and Cooloola Coastcare, another active community-based organization with a strong record in environmental protection. Due to the time between the granting of the Permit and the event, there was no time to procure other financial support via grants so FIDO underwrote the cost of staging the event. That exceeded \$7,000.



The Cooloola BioBlitz logo surmounted by the iconic Cooloola Monster was developed by Cooloola Coastcare volunteer r??????

Venue and timing: The August date was chosen in February because it was expected that the bush would be blooming with new life. The two very dry months leading up to the event however meant that it didn't fully live up to expectations. Rainbow Beach was chosen for its location in close proximity to the study sites and the accessibility of those sites and the availability of a venue for the administrative headquarters. This is the first of a planned series of Cooloola BioBlitzes over the next three years and other BioBlitzes will be held in different seasons. The date has already been set for the next full scale BioBlitz on the weekend of 17th to 19th May, 2019. However specialist

groups are anticipating special surveys that are at optimum times for their speciality and these specialized surveys for frogs, fungi and particular insect groups are likely to add enormously to our knowledge of Cooloola and its ecosystems.

Methodology: The success of the BioBlitz was greatly due to the outstanding team leaders. Some of Australia's most highly regarded specialists in their respective fields took part leading small groups of citizen scientists into the field and supporting the identification at headquarters. The great wealth of experience from the experts helped to raise the skills of the citizen scientists both in the field and back in the debriefings. This assisted the identification and gathering data on plants, vertebrate and invertebrate fauna, birds, plants and fungi.



Photo during the BioBlitz by Suzanne Wilson

The data so far gained: Within days of the conclusion volunteers had entered a total of almost 700 individual observations but that is less than half the anticipated total entries. For example, there are still additional data sheets turning up and botanist extraordinaire, Lui Weber, who could only get into the field for an hour, is still defining his list of 200 observations ready for data entry.

Many plant specimens are being prepared to be submitted to the Queensland Herbarium for identification while many spiders and insects will be sent to the Queensland Museum for confirmation and this takes time. In the meantime, our database continues to grow thanks to dedicated efforts to enter the data by IT savvy volunteers, Randy Orwin (Cooloola Coastcare's Digital Content Manager and Webmaster) and Dr. Charles Worringham.

Spider expert Robert Whyte said that, after narrowing down 700 spider specimens to 350, he expected many to be new species not previously described. Many of the spiders are so small that they need to be identified under a microscope, but they still play a vital role in the ecosystem. He assessed the spiders coming from 35 different families but he will be poring over the specimens for weeks to identify them more

precisely with the assistance from the Queensland Museum. He said that having collected all over Australia, Cooloola was amongst the top spots for biodiversity he had encountered.

Bird observers listed 99 different species seen over the weekend but because Cooloola is regarded as one of Australia's top sites for bird-watching, all had been previously recorded for the area.

Botanists were more than busy as they scoured the bush and mangroves adding many new species to the wide array of plants that were previously recorded for Cooloola. In the Inskip Point peninsula area, where previously only three species of plants were recorded, Glen Leiper and his team recorded 60 species in very short time. Within the botanical teams was a grass expert, Dr. Melodina Fabillo from the Queensland Herbarium, who is still to confirm the identification of all 40 specimens collected but this will add greatly to the list of grass species previously recorded from Cooloola.

Naturalist Ian Morris came down from Darwin to lend a hand. No better observer of nature can be found. He was able to illustrate the presence of Melomys and dingoes from the evidence they left behind. The evidence of the giant earth worm *Digaster keastii* was all around the Bymien day-use area. Although nobody saw these subterranean worms, over 30 mm in diameter and up to 60cms long, their obvious castings confirmed their presence.

Citizen Scientists: Participants ranged in age from 8 to 81 and came from many parts of South East Queensland and beyond. They included complete novices to experts, with specialists helping the less experienced identify and learn more about nature in the process. Their quests were enhanced by the discoveries made by the invertebrate teams and the presentations by experts.

Presentations: Bioblitz participants heard presentations from a range of experts, with one of the important themes being the complexity and uniqueness of the Cooloola ecosystem.

The features of the soils and the dune systems were emphasized by Prof. Susanna Schmidt in her description of microbial-plant interactions beneath the dunes and how this changes between the youngest and most ancient dunes.

Dr. Don Sands described the critical role of moth larvae in breaking down leaf litter, the under-appreciated role of many insects as pollinators, and their susceptibility to inappropriate fire management regimes. His presentation helped shift the BioBlitz focus to give a broader vision of the total ecosystem.

Robert Whyte, a nationally acclaimed spider expert, presented some amazing photos and facts that made the audience rethink attitudes about these most maligned and misunderstood creatures. The fact that the consumption of animal protein by spiders is only exceeded by humans and whales added to the new realization of the importance of these overlooked invertebrates.

The Nature of Cooloola was described by passionate local naturalist Kelvin Nielsen who has spent more than 50 years observing and studying every part of the ecosystems. Although his primary interest is in birds, we ended up with an appreciation of the total environment of the Gympie region.

Dr. Melodina Fabillo from the Queensland Herbarium provided an excellent explanation of preparing specimens to be sent to the Herbarium. It prompted planning to

incorporate briefing citizen scientists at future BioBlitzes on lots of practical sessions to build up basic skills and expertise so that the data collected is more useful and relevant.

Organization: A large measure of the success of the BioBlitz is due to the dedication and organizing ability of the Coordinator, Dr. Lindy Orwin and the small team from Cooloola Coastcare and FIDO.

Follow-up: There is already a BioBlitz Facebook Group for those interested to interact and this will be a vehicle for those specialists wishing to pursue mini-BioBlitzes under the auspices of FIDO and Cooloola Coastcare.

Discovery of the Boronia moth –

Pseliastis sp. (Heliozelidae)

Scientists participating in the Cooloola BioBlitz over the weekend were excited to discover a small moth new to science crucial for pollinating Boronias. The moth that excited such interest is only a few millimetres long, but CSIRO entomologist Dr. Don Sands said that it may hold the key to saving threatened Boronias including the endangered Wide Bay Boronia.

During his brilliantly illustrated presentation on the importance of invertebrates in the ecosystem on Friday night, Don Sands had drawn attention to the nexus between pollinators and the survival of plant species. Little did he realize how that would result in one of the BioBlitz's most fascinating discoveries.

Cooloola has a lot of insects and arthropods, which spiders love. In Cooloola, the largely untouched vegetation attracts the insects and arthropods, which in turn attract the spiders. Arthropods (animals with an internal skeleton and paired legs) make up 80 per cent of living creatures and are the arachnids' natural prey.

One of the botanical team leaders, Shelley Gage (Goomboorian) is a local in the Cooloola region. She described how she paid attention to Don's words to help a most exciting discovery:

'On the 25th August 2018, during the Cooloola BioBlitz my team was recording plants on the slope between the sand track and the fens.

During our lunch break I wandered near the road taking more photos and noticed many small insects flying around a Boronia rosmarinifolia. They were not settling so it was difficult to see what they looked like but I had the impression they had chrome covered wings. The team all came over and tried to capture them with cameras but the insects were too fast.

On arrival at the BioBlitz base, I spoke to Don Sands who became quite excited and we organized to go back on the Sunday morning to collect some of the insects.

On examination Don said he believed they were in the family, Heliodinidae (metal moths) which contains many insects about which little is known. He will have the moths identified or described if they have not already been identified. Many of these moths are believed to be pollinators of Boronia and each one may be specific for a particular Boronia.

We are now excited to start looking at not only the plants for identification and recording but also associated insects to have them identified and their function in the insect's life cycle determined.

Shelley's observations led to one of the most exciting finds of the BioBlitz. Don Sands sent the specimen away and soon discovered that the moths were of a new species to science. They were provisionally identified by Prof. Doug Hilton (a specialist in the group) as an undescribed species of moth, *Pseliastis* sp. (Heliozelidae).



Dr Don Sands CSIRO entomologist collects the *Boronia* moth from a *Boronia rosmarinifolia*. This discovery may help to save local rare and threatened *Boronias* (*B. rivularis* [Wide Bay *Boronia*] and *B. keysii* [restricted to a very small area in southern Cooloola])

The exciting discovery is stimulating new research projects, forums and discussions to follow up this discovery and also the implications for the survival of several *Boronia* species.

The discovery of new moth and spider species in Cooloola has also revived interest in the occurrence of a genus of primitive moths *Agathiphaga* known as kauri moths that were only discovered in 1952. They have been recorded from Cooloola. However despite their interest to science, they have not been recorded for several years. It is now hoped to seek them out again for further research. The caterpillars feed only on "kauri" (*Agathis*) and are currently considered the second most primitive living lineage of moths after *Micropterigoidea*. The larva has been reported to be able to survive for 12 years in diapause.



Agathiphaga queenslandensis Dumbleton, 1952 Qld Broutha Scrub



Spider enthusiast Robert Whyte helped lead 80 scientists and volunteers during the event

Meet Spiderman

Robert Whyte, who lead the spider team on the BioBlitz, said, "People might be alarmed, but these aren't big hairy spiders. These are tiny little things that look like jewels." His passion for spiders is contagious and his photos reveal why.

Robert says that spiders are generally a predator, but they also adapt to the prey available.

"They don't need a specialist food plant like a lot of insects do. They actually get into whatever is available. Spiders eat so much food. They are the third-largest meat-consuming animals on the planet as a group, behind humans and whales," he said.

In assessing Cooloola Robert said, "The insects are just incredibly diverse and abundant. Insects are found in all sorts of niches and spiders eat them in all sorts of niches. They adapt. You cannot have the diversity of spiders without having diversity of insects and arthropods."



The crab spider has been declared the "most beautiful" of the 37 new species. Photo by Robert Whyte)



One of the major discoveries is believed to be a new Australian spider family. (Supplied: Robert Whyte)

Keeping the Natural Understory

The popularity of ride-on mowers is progressively destroying Australian understory habitat. This habitat, so vital to small birds and other animals, is being progressively whittled away by the Western human obsession to tidy up the areas around their homes.

So many people living on larger properties seem to have an obsession to manicure the landscape. This frequently extends to moving even the road verges adjacent to their property.

Most Australian ecosystems surrounding human habitation would have once been natural bush with understories that provided critical habitat for many animals. The result has been the disappearance of so many small birds that were once frequent visitors. Wrens, finches, thornbills and other species require the protection of an understory.

To enable the ride-on mowers to sweep the forest floor clean of any tall grass, requires removing all lower branches of any trees to allow free movement of these machines. Thus it isn't only the forest floor where the loss of habitat is occurring but also the trees themselves have to be mutilated to provide clear passage.

While the practice of tidying-up the understory has been widespread amongst the semi-rural citizenry for some time, it has been a shock to discover this practice being taken up by the very government agency responsible for the protection of the state's wildlife — the Queensland Parks and Wildlife Service.

Within a few months of K'gari being declared part of the Queens Commonwealth Canopy, the QPWS was tidying up another area around the Eurong Ranger base to be able to have a clean "tidy" forest floor. This meant pruning off every low branch on every tree. Attractive Quinine trees and Cypress will never regrow their once attractive lower branches. The habitat was destroyed

Preserving natural habitat for increasingly endangered species is made more difficult when the agency that should be setting the example is carried away by an obsession with tidiness.



An area at the Eurong Ranger Base where the QPWS has "tidied up" the area. Once attractive trees that once afforded habitat to small birds were mutilated so that the ride-on mower could more easily move through to destroy any ground cover there. See Backgrounder 83 with this MOONBI.

K'gari's Lantana Attacks

On two recent Eurong Bush Regeneration working bees FIDO has sent teams to attack an impenetrable wall of Lantana that had developed in what had been an old dump. This daunting, seemingly impossible task was undertaken because the lantana thicket was harbouring other weeds such as Cocos Palms. These are already a serious weed threat on K'gari. They germinate within flying fox spitting distance of mature fruit-producing Palms. It is vital to ensure that no more fruit producing Palms are allowed to become established because that would extend the spread of this weed that could become as serious a weed for the island as lantana has been.



Volunteers hacking through lantana to reach a Cocos Palm

Biological Control of Lantana

There has been no silver bullet biological control for Lantana as there was for Prickly Pear. Instead there has been a combination of many introduced pests to weaken the prodigious lantana.

The objective of the biological controls is to reduce plant viability and prevent lantana's further spread by stressing plants and reducing seeding processes.

There have been 32 biological controls introduced to work on one of the worst Australian weeds. Many have failed to cope with the Australian conditions and the hybrid lantanas that have been developed. Seventeen (17) are still slowly working through to achieve some effects.

On K'gari, it has resulted in significant die-back. 5 bugs, 5 moths, 4 beetles and 3 flies are progressively weakening the plants. In addition rust is now also working. That is why we now have a chance to bring lantana on K'gari under control

There are the Big Four. A leafsucking bug, (*Teleneia scrupulosa*), was introduced in 1956 and is the best card in the pack. A leaf mining beetle (*Uroplato giardia*) comes in second. Then there is the seed-eating fly (*Ophlomya lantanai*) that lays its eggs on the green lantana seed and its caterpillars then eat out the seeds. Another leaf mining beetle is (*Octotoma cabriponis*). These four achieve more than the rest of the other bio-controls combined.

Biological controls work best on isolated lantana plants and where the thickets have been thinned out.

Queen's Commonwealth Canopy Celebrated



The visit of the Duke and Duchess of Sussex to K'gari on 22nd October caused a media frenzy on the island and headlines around the world. Although he and the Duchess were scheduled to stop over at Kingfisher Resort, the pregnant Duchess didn't accompany him on the circuit through the island even though the roads were smoother than usual. Prince Harry caught the *Fraser Venture* ferry from Mary River Heads to Wanggoolba Creek. He had been met at the airport by Kingfisher tours manager, Colin Anderson and driven from the ferry to Pile Valley for the big ceremony, the reason for his visit. It was the unveiling of the same plaque that his father had unveiled in Bundaberg in April celebrating, the Queen's Commonwealth Canopy.

The ceremony was short and very impressive. Gayle Minniecon delivered a very eloquent and most pertinent Welcome to Country on behalf of the Butchulla. The Premier delivered a short speech welcoming Harry and giving the history of the plaque. The Prince gave an eloquent speech summarizing the Queen's Commonwealth Canopy and unveiled the plaque. There was dancing by the Butchulla dance troupe and then there was a rush by the dozens of Butchulla present to shower the prince with gifts and greetings.

Then he was whisked off to Lake McKenzie (Boorangoora) and on to McKenzies Jetty for a meeting with another Butchulla contingent before boarding the *Tasman Venture* for lunch and a reunion with the Duchess before cruising the short distance along the North White Cliffs coast to the Kingfisher wharf for the public Royal walk along the jetty before retiring to their villa for the night.



After the Royal entourage left John Sinclair was collared by Kate Jones former Environment Minister to have my photo taken with her and the Premier beside the plaque. Chatting with the Premier, he learnt that at some stage she was at a reception when she was collared by the Queen's Private Secretary and asked if Queensland would be interested in participating in the Queens' Commonwealth Canopy project. Anastacia said she joined the dots "Queen's Canopy — Queensland" and instantly agreed. The reverberation from that instant decision were evident with the publicity and media exposure of K'gari resulting from the Royal visit.



Prince Harry greets members of the Butchulla Dance Troup in front of the freshly unveiled plaque.

New FIDO Publications

Throughout the 1970s and early 1980s FIDO published and distributed maps of K'gari and Cooloola. As John Sinclair nears the end of his long term as CEO FIDO is planning to produce three of his nearing completion books. *Fraser Island's Bulldog* is an autobiography that provides personal insights into his long campaign to protect this now World Heritage site. His *Insiders' History of K'gari and Cooloola* provides insights into the main issues and conflicts in the Great Sandy Region where he has been an intimately involved campaigner for half a century.

K'gari Kids Stories

Since 2005 John Sinclair has been writing children's stories (more than 130 of them) for his grandchildren whenever he is away for a week or more. He has compiled 50 of these, connected with K'gari and written while on various safaris and working bees, into a single anthology. They are ready for mailing. Order or inquire now: john@fido.org.au



John Sinclair's
K'gari Kids Stories



K'gari Research Progress and Conferences

Because of the shrinking government contributions to protect the natural environment much of FIDO's current activities are centred around citizen science and volunteer projects. Volunteering leads to citizen science and citizen science leads to volunteering. However, FIDO is engaged in some very serious research to help us protect our very special World Heritage site including funding research to seek sustainable transport options for K'gari and a multi-disciplinary study to better understand the impacts of the Mary River discharge on Great Sandy Strait. FIDO is also engaged in promoting science to help the management of K'gari through our own and other conferences.

Sustainable Transport Options

With every visit to K'gari (Fraser Island), it is increasingly obvious by observing the ever-increasing erosion of the roads that the current visitation reliant exclusively on 4WD transport is unsustainable at least in the island's internal roads. It is for this reason that, using the Barbara Winkley Bequest, FIDO is sponsoring a three year study at the University of the Sunshine Coast to explore sustainable transport options. The first stage of the field work involves an environmental assessment of the existing transport system on the island's ecosystems.



Once downcutting starts it continues as long as the road is used

Anyone skeptical of Science should have their smart phones taken from them and they should be stopped from using modern transport because this is all the result of science.

Australian Biosphere Conference

Brolga Theatre Maryborough

13th – 15th March 2019

Fraser Island has double UNESCO recognition. Apart from being a World Heritage site, it is part of the Great Sandy Biosphere Reserve that adjoins the Noosa Biosphere Reserve to the South. The BMRG that nominated the Great Sandy is also organizing the inaugural Australian Biosphere Conference 2019, a first-of-its-kind and an opportunity to learn, share and celebrate what it means to be part of a vibrant, healthy and connected Biosphere Reserve community.

Days 1 and 2 of the program incorporate guided art and photographic gallery tours, an expansive exhibitors' marquee, two themed presentation streams, keynote UNESCO address, interactive panel session and two fully-catered social functions.

Day 3 offers the choice of 7 exciting and engaging tours aimed at showcasing the richness and diversity of the Great Sandy Biosphere and its community. For more details and bookings, see:

<https://greatsandybiosphere.org.au/conference/>

Great Sandy Strait Research

While there may be some temporary reprieve from the immediate development of the Colton Coal Mine as the proponents question the viability of the project (see below), FIDO is determined to establish an overwhelming scientific basis for the reasons to protect Great Sandy Strait. This involves conclusively establishing how far the various sediments are carried from the Mary River into Great Sandy Strait and where they are dispersed.

A multi-disciplinary team from University of Queensland has now begun its initial assessment on the *Hydrodynamics & Materials Transport in the Mary River Estuary*. The team of Assoc. Prof. Ron Johnstone, Dr Daniel Harris and Dr Sarah McSweeney is drawing on the \$25,000 provided by the Great Sandy Strait Research Oversight Committee comprising FIDO, the Mary River Catchment Coordinating Committee and Greater Mary Association.

The central aim of the study is to assess the potential for metal and other waterborne contaminants from the Colton Mine to reach and affect downstream RAMSAR and World Heritage Sites in the Great Sandy Strait ecosystem. This will build on previous investigations and assessments of metal dispersal in the Mary River but will incorporate Great Sandy Strait into the boundaries set for geomorphological, sediment distribution, contaminant distribution and modelling studies.

Colton Coal Mine

In a statement to the Australian Stock Exchange on 18th October, New Hope Group advised that its two subsidiaries that owned the Colton Coal project had gone into voluntary administration. New Hope says that increased charges for access to the Wiggins Island Coal Export Terminal "have a material impact on the viability of that project," It's now listed as an "onerous contract" on the company's books. New Hope has written down the value of the Colton exploration assets and will reconsider whether to continue with it.

The proposed Colton mine near Maryborough planned to dump untreated mine waste in the Mary River, threatening the nationally significant Great Sandy Strait near the World Heritage-listed Fraser Island. This mine should never go ahead because the planned waste water discharge into the nearby Mary River will undoubtedly pollute the magnificent estuarine system. This is a most serious threat and one FIDO, the Mary River Catchment Coordinating Committee and the Greater Mary Association is determined to stop. The research project is a key part of that campaign.

The recent visit by Royal couple Prince Harry and Meghan Markle to Fraser Island demonstrated how important it was that the environmental values of the region were not compromised. This beautiful region has just been broadcast to the world, and it is reassuring to know that development of the Colton mine is now on the backburner and our environment is safe for now.

Saturday 31st August 2019
8th Biennial K'gari (Fraser Island) Conference
 Fraser Coast Campus, University of the Sunshine Coast
Community, Culture and Collaborations
 This Event is a collaboration between the Butchulla Aboriginal Corporation and the Fraser Island Defenders Organisation

The one day conference runs 9.00am to 5.00pm. Allowing visiting guests to join a whale-watching trip before heading home on Sunday.

Four sessions 9.00am to 5.00pm

Session 1 Community: will cover aspects of K'gari that have important implications for the whole community. Steve Birdsell, internationally acclaimed social psychologist and advocate for wilderness experiences, and Keynote speaker for this session. He is author of 10 Things Girls Need Most, Raising Girls, Raising Boys, Complete Secrets of Happy Children and The New Manhood.

Session 2 Culture: covers a range of issues the K'gari has on our culture, with a heavy emphasis on Butchulla culture. Wayne Blair prominent Butchulla actor of national standing, (Radfarm & other TV series & plays and producer of the movie 'The Sapphires').

Session 3 Collaborations: covers the many collaborations working to manage the K'gari and protect its World Heritage Outstanding Universal Value. It is planned to have speakers from Federal, State and local government and other K'gari stakeholders will participate in this session.

Session 4 Open Community Forum: This session will operate along the lines of ABC's Q&A with members of the audience invited to submit their questions to the panel. It will be free and open to the public.

Further conference details will be posted at www.fido.org.au as they are established.

The collaboration between FIDO and the Butchulla promises to produce the best Conference yet. At this stage please make sure that this one-day event in Hervey Bay is locked into your 2019 calendar of events

Keep up to date with K'gari News

Every month FIDO sends out a digest of news pertinent to K'gari and Cooloola that we have garnered through the internet. This provides fascinating reading. Like FIDO's K'gari E-Newsletter these are only available via the internet and by Email. Subscribe to john@fido.org.au to receive these free.

Bush Regeneration-Weeding Program

Since the Federal funding under the National Landcare program ceased on 30 June 2018, FIDO has been losing more than \$1,500 for each of the four working bees that we continued to conduct in 2018. This is clearly unsustainable, but we can't afford to lose the gains that we have made on the weeds especially since 2011. The weed program will continue in 2019 but under a much tighter business model where we will be asking for a larger cash contribution from volunteers. At the moment we are proposing the following working bees for 2019 with strictly limited numbers and payments made through Eventbrite when advised. If we get support from other sources we plan to increase the number of working bees in Happy Valley.

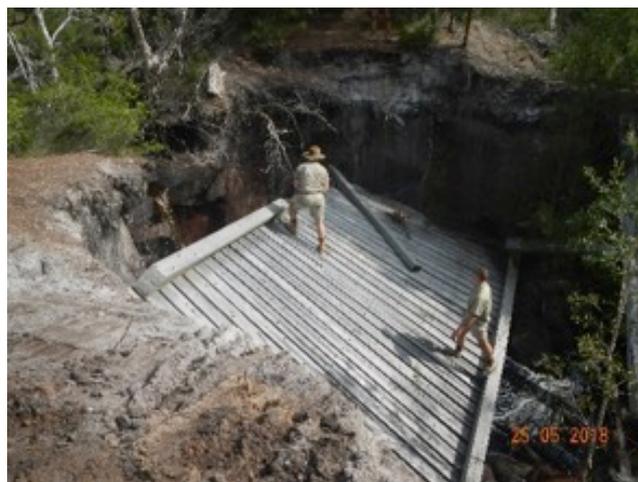
Planned FIDO Working Bees 2019

Eurong - Sunday 31st March to Saturday 06th April.
 Happy Valley – **Easter Cassia Blitz** - Sunday 29th April to Saturday 5th May
 Eurong - Sunday 21st to Saturday 27th July
 Eurong - Saturday 12th to Friday 18th October

The Army lends K'gari 60 hands.

At no cost to the QPWS, the Australian Defense Force contributed to the management of K'gari. From May 25th to June 3rd, 2018 30 personnel from the 6th Engineers Support Regiment of the Australian Defense Force undertook project works on K'gari, as a training exercise while based at the Ungowa Campground. The works undertaken saved QPWS an estimated \$60K

Their first task was to salvage of the Buff Creek timber bridge that had collapsed into the creek bed in 2011. The timber salvaged deemed to be in good condition will be used to repair other bridges in the area.



Amongst other tasks the engineers also removed the former Forestry boat ramp at Ungowa that was deemed to be unsafe for use and installed 40m of timber palleting on the Hook Point 11 km beach access track.



Potentially useful salvaged timber has been stored for future use