



MOONBI 136

MOONBI is the name given by the Butchulla Aborigines to the central part of their homeland, Fraser Island or "Kgari"

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 135

FIDO continues to run a busy program of engagement with the community, with traditional owners and other stakeholders in K'gari to protect its natural integrity. Some of these programs and projects are described in MOONBI including the 7th Biennial (T,T&T) Conference and the war against Jamella that FIDO has actively supported.

Conference: The Time Tide and Tourism (T,T&T) Conference held on 16th august was a success by our standards. A summary is featured on p4.

Sustainable Transport Options: The pursuit of more sustainable transport options for K'gari continues to be one of FIDO's highest priorities. USC PhD Candidate Ross Waldron has now begun his three-year study to reduce the environmental impacts of people movement on K'gari. A summary of his project can be found along with other Conference presentations on FIDO's web site. <http://fido.org.au/conferences/time-tide-and-tourism/>

Colton Coal Mine: Because FIDO is so concerned about the natural integrity not only of Fraser Island but of the whole of the Great Sandy Region, we can't turn a blind eye to the impacts of the Colton Coal Mine that will be releasing vast volumes of acidic water into the Mary River and ultimately into Great Sandy Strait. The Queensland Government gave the green light for three mine leases in May, 2017 despite the pleadings of the Mary Valley Catchment Coordinating Committee. MRCCC already had an application in to Josh Frydenberg to make this a controlled action under the EPBC Act. However in September The Environment Minister's delegate declined the opportunity to reconsider.

It is for this reason that FIDO has re-entered the fray to stop a mine even though the mine isn't on Fraser Island. As this story on the basis of FIDO's position was being written up for MOONBI, we learnt that Canberra bureaucrats had decided not to make this a controlled Action. FIDO is collaborating with many groups to develop a strategy to see that this out of place mine never comes into being. Prepare for a potentially costly and intense campaign. See pp3-4.

One Man's Bioblitz: The tribute to Queensland's most enterprising and adventurous bioblitz is large but deserved. Although Jim Gasteen's efforts were directed elsewhere in the state, his testimony is the greatest single contribution to enlarging the National Park estate in Queensland that has ever been made (or ever likely to be made) by a private

citizen. His mammoth work shows what can be achieved through BioBlitzs. See p9

FIDO on Facebook: While we continue to maintain and expand a very comprehensive FIDO Web site, young volunteer Ashleigh McMillan continues to maintain our Facebook page to alert potential volunteers to FIDO's programs. At last count we had 100 followers and growing.

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: It is now 25 years since K'gari's World Heritage listing. To mark this silver jubilee FIDO has produced Backgrounder 82 outlining some of the turbulent history of the difficulties leading up to its inscription. Backgrounder 83 discusses the almost indefinable and very subjective qualities of Wilderness. As it is progressively eroded away Wilderness becomes increasingly precious. Preserving K'gari's wilderness becomes more critical with time.



FIDO has added another new species to the K'gari (Fraser Island) plant list. Curiosity and sharpened awareness stimulated by last December's BioBlitz made our volunteers determined to identify this mystery plant never previously recorded in South East Queensland. It turns out to be *Thespesia populnea* related to the Hibiscus with a pan-tropical distribution. It was probably deposited at Eurong by a recent high tidal surge.

In This Issue

Colton Coal and Great Sandy Strait	2
Have the Federal Bureaucrats got it wrong?	3
7 th Biennial T,T& T Conference Summary	4
Playing with Fire Dr Who?	5
K'gari Pandanus Dieback Collaborative by Joel Fostin	6
FIDO President's Annual Report	7
News Briefs	8
One Man's One-person Bioblitzes In memory of Jim Gasteen.....	9

Colton Coal and Great Sandy Strait

Given the volume of water discharge and its chemical and mineral content as well as its proximity to the Ramsar Great Sandy Strait to say that Colton Coal won't impact Great Sandy Strait is either flippant or dishonest. The health of Great Sandy Strait is critical to the health and values of the existing Fraser Island World Heritage area and even more critical to the proposed extension to the area.

The proposed Colton Coal mine is located just 11km north of Maryborough and 20km west of Hervey Bay. FIDO's brief doesn't extend to the considerable and serious on-site and other mainland impacts. We are though most concerned at maintaining the natural integrity of the Great Sandy Region Ramsar site. FIDO believes that the volume of water to be discharged, almost 1 billion litres annually and the heavy metals and other pollutants contained presents such an unacceptable risk to the natural integrity of the Great Sandy Strait Ramsar site that it should not be allowed to proceed. Even the proponents admit that there is "*potential for harm to a significant environmental value in the event of a failure to contain scenario*"



Great Sandy Strait is a Wetland of International Significance. It was inscribed as Ramsar site 992 in 1999. Its 93,160 ha includes marine, estuarine and intertidal wetlands and salt pans. The intertidal wetland habitats consist of:

- 15,500 ha of mangrove forests,
- 12,300 ha of intertidal and subtidal seagrass beds,
- 2,800 ha of saltmarshes, unvegetated mud, sand and salt flats, and estuarine and channel waters of varying depth and width.

It is a very special place deserving the highest level of protection.

Great Sandy Strait is a narrow shallow protected Heritage waterway separating Fraser Island from the mainland and has a rich historical and cultural heritage which has been under-recognized

For most of its history the Woody Island geological syncline has blocked the Mary River from flowing into Hervey Bay. Even now most of the discharge from the Mary River flows south rather than into Hervey Bay This is evidenced by the tidal delta south of River Heads.

The tidal delta makes a perfect habitat for trans-equatorial waders. A wide range of migratory and resident waders, waterbirds and seabirds uses the area. Eighteen of the 24 migratory shorebird species listed under JAMBA and CAMBA use these wetlands. The area is recognized as among the most important roosting sites for migratory trans-equatorial shorebirds in Australia. Counts of up to 40,000 shorebirds have been recorded. Waders use the expansive tidal flats intensively, especially near the seagrass beds.

Great Sandy Strait is the most important of thirteen areas for the Eastern Curlews, containing 14.3% of the known Australian population. Only a handful of sites on the eastern seaboard hold a majority of the population. This population becomes even more endangered if we fail to protect this very significant part of their Australian habitat from pollution

Summary of Potential Impacts

The two greatest threats arise from the release of acidic water mixed with a toxic load of heavy metals.

pH: Once the coal seam is exposed to air the sulphur in the Pyrites begins an endless chain reaction generating sulphuric acid. This poses a huge environmental threat to the natural integrity of Great Sandy Strait. Most aquatic life is extremely sensitive to any changes in pH and water quality.

Heavy Metals: Heavy metals (Aluminium, Arsenic, Boron, Cadmium, Chromium, Cobalt, Copper, Lead, Manganese, Nickel and Zinc) will be flushed into the Mary River as a result of the mining process. These don't breakdown like other pollutants do and they will continue to accumulate in the sediment and potentially in the water for year after year while the mine is in operation. While they may plateau when the mine ceases operation, they will persist in the sediment and continue entering the food chain long after.

The need to discharge: The most obvious impact arises from the water that will seep continually into the deep open cut pit which will cut through various aquifers. That will change the hydrology of land surrounding the mine making it more drought sensitive. Discharging the water contaminated by acid forming from sulphur exposure and heavy mineral exposure will be done to allow mining to proceed without the pit flooding. It is integral to mining operations. Polluted ground water from Colton Mine is will be pumped out of the pit and discharged into Mary River at the Devil's Elbow, Dundathu just 8 kilometres up from the Great Sandy Strait Ramsar site.

The mine will need to discharge 946 megalitres of untreated mine polluted water annually. That means that 200 litres (equivalent of 10 x 20 litre containers) will be discharged directly into the Mary River every second (600 jerry cans per minute). Just imagine people flushing that volume of contaminated undrinkable water into the estuary and what it can do to life in the river. While this amounts to 5.8% of the average daily Mary River flow, it needs to be noted that there have been extended periods in recent years when no water has flowed over the upstream Mary River barrage. In this situation this toxic mix will be left sloshing around the lower reaches, the estuary and Great Sandy Strait. It is a reality that is easily glossed over using annual averages.

- The proponents admit that there is the potential for the dams to overflow during flood events discharging the toxic contents into the Susan River;
- The site is in the centre of one of the largest areas of remaining intact Wallum on the planet. It has been classified as having high environmental values
- Because the mine will be open cut, working in a deep pit cutting through layers of groundwater aquifers, the environmental impacts will be felt far beyond the mine site.

The future of the Colton Mine rests with Federal Environment Minister Josh Frydenberg who has the power to make this mine subject to the EPBC Act.

Have the Federal Bureaucrats Got it Wrong?

In October 2010 the Federal Environment Department made the decision that the Colton Coal Mine should not be a controlled action under the Environment Protection Impact of Proposals (EPBC) Act. In the light of new information since the Department was asked to review this decision. They are not prepared to admit that they made a mistake. The result is that for all of the hyped up claims of protecting the Australian natural environment (or at least critical components of it), the EPBC Act, the bureaucracy and the politics have so far failed Australians yet again. Failure to make this a controlled action puts one of the nation's top tidal estuaries at risk of pollution and long-term biological decline

In August 2010 the Federal Environment Department advertised on its web site for 10 business days that the Colton project area would be 1023.6 hectares (ha) and the disturbance footprint would be approximately 400 ha. Mine infrastructure would include: open-pit coal mining excavations; haul roads; a coal handling and processing plant; product coal stockpile; train loading area and rail loop. Without further inquiries and since no public submissions were received on 6 October it was determined that the project was not a controlled action for the purposes of the EPBC Act (the original decision).

In December 2016 the Mary Valley Catchment Coordinating Committee wrote to Federal Environment Minister Josh Frydenberg requesting reconsideration of the proposed Colton Mine Project as a Controlled Action on the grounds of its potentially serious adverse impacts to the Great Sandy Strait Ramsar site which is threatened by waste water discharge and run-off from the mine. This request was based on new information that had become public knowledge since the original decision particularly in relation to the potential impacts on Great Sandy Strait.

On 26th September 2017 the delegate for the Minister advised that *“the proposed action does not require further assessment and approval under the EPBC before it can proceed”*



Great Sandy Strait will see a progressive lowering of pH between floods and progressive accumulation of heavy metals in the sediments during and immediately after the life of Colton Mine

Cop-out on pulling the water trigger

Although the EPBC Act was amended June 2013 *“to provide that water resources are a matter of national environmental significance, in relation to coal seam gas and large coal mining developments”*, the water trigger provisions won't be applied because it had been determined back in 2010 Colton Coal wasn't a controlled action. In responding to the request for a review Geoscience Australia also noted that the new sections 24D and 24E of the EPBC Act were inapplicable to the reconsideration

A critique of the “Reconsideration”

Despite the estimated size of the reserve more than doubling since 2010 the Department doesn't deem it to be an important consideration to review this first tranche of Colton Mine more critically. The application only escaped mandatory requirement to produce an Environmental Impact Statement because it fell just short of the critical planned production target that could trigger a requirement to produce one. Such an EIS would have provided essential details on the pH and the volume of water to be discharged. Had there been a proper EIS back in 2010, it would have raised many more red flags and doubtless seen a raft of submissions to invoke the EPBC.

It is astounding that contrary to those with local knowledge being so convinced of the cumulative adverse impacts on Great Sandy Strait, Canberra hasn't waived from its 2010 position that the project is unlikely to have significant impacts on the ecological character of Great Sandy Strait Ramsar wetland as the distance of the discharge location from the Ramsar site and the potential for damage on the Ramsar site were considered previously. **Probably one of the greatest flaws of the Canberra desk exercise was the failure to recognize that the Fraser Island World Heritage area already extends into Great Sandy Strait.**

The most frightening mistake of Canberra's evaluation in FIDO's view was to consider work on annual average daily flows of the Mary River ignoring the fact that even since the 2010 decision the Mary River has for periods ceased to flow over the tidal barrage. At such times the only flow in the Mary River is generated by tidal movement. Canberra considers limiting water release to the outgoing tide is apparently going to be good enough. It is the discharge of water that is FIDO's greatest concern yet Canberra seems to have chosen not to give due weight to the implications of how and when the heavily polluted and acidic water is discharged and is content to accept the proponents views of working on averages

Canberra has accepted the need for some sort of monitoring of the Susan and Mary River to occur but without any determination of who will carry out the monitoring and what happens if the minimum environmental standards fail to be met. Will the working of the mine be stopped and what remediation would there be to correct the problem?

The possible failure of the high hazard dams located in the Susan River catchment seems to have been glossed over ignoring the flood history of the region and the history of failure of similar dams at other Queensland coalmines.

It was most disappointing that the MRCCC's appeal to Canberra to have the original decision reconsidered was dealt with so casually with the very real threat to Great Sandy Strait's natural integrity being ignored.

The 7th Biennial (T,T&T) Conference

FIDO's 7th Biennial (T,T&T) Conference in August was a resounding success reaching a critical mass of 100 attendees but having a wider impact through the knowledge exchange and the focus perspectives that it brought to bear on some key issues. All seven Fraser Island conferences have allowed much interaction between so many people who have a strong interest in K'gari. They have also enabled attendees to take stock of many issues, retiring some and bringing others to the fore. The T,T&T conference threw up two new issues now well-established in the overall FIDO agenda —Colton Coal Mine and the value of BioBlitzs.

Sadly in opening the conference Dr John Hookey spoke off the cuff and we don't have a record of his insightful recollections of the Fraser Island Environmental Inquiry that he chaired in 1975 that led to the cessation of sandmining 40 years ago. Thus, while I have Martin Buzacott's notes, we haven't captured the very significant comments by John Hookey that have great historical significance. He explained the significance that Fraser Island has played in shaping environmental law in Australia and his strategic approach to seeing the Inquiry's recommendations accepted and implemented by the Commonwealth Government.

The other presentations were well-presented, very relevant and well received. We ended up with too much content and not enough discussion. This needs to be addressed next time around. There was also the added interest of the art by the RATS

An inspiring Keynote address by ABC Classic FM broadcaster Dr Martin Buzacott set the tone for excellence. He discussed "*Drawing Artistic Inspiration from the Landscape*" and the role that the contributions that artists have drawn not only from K'gari but from other great landscapes. His theme was illustrated by an exhibition in the foyer of works created during FIDO's BioBlitz by the Fraser Coast Regional Artists and Tutors (RATS).

That collaboration between artists and citizen scientists illustrated the theme taken up by Chris Loorham in his paper (on the web site) "*From Confrontation to Collaboration*". Chris was an adviser to the Fraser Island Environmental Inquiry with Dr Hookey in 1975-76 and when he returned to K'gari as a volunteer on a FIDO working bee, he observed just how much community attitudes and relationships had changed in the intervening 41 years.

It was a presentation by Dr Tanzi Smith of the Mary River Catchment Coordinating Committee on the Colton Coal Mine that rang alarm bells amongst the delegates when she revealed that this mine that so threatens the natural integrity of Great Sandy Strait was approved by the Queensland Government without any Environmental Impact Statement because the size of the deposit was understated. That enabled the whole enlarged scheme to slip through without proper scrutiny. The public needs answers to some very critical questions. Representatives of the very active Great Sandy Strait Saviours were there with a desk outside to answer some of those vexing questions.

- Why have the plans for the hazardous materials dams been scaled back to increase the potential for severe environmental impacts on the Susan River Catchment?
- What is the anticipated pH of the water being discharged into the Mary River?
- What are the volumes and projected impacts of the heavy minerals in the sediments and how long will these persist?

- What is going to be the impact on the fauna that has until now made Great Sandy Strait its home?

There was enough meat in the program that it was a disservice to the many presenters to compress it all into just one day but it was stretching the potential audience to extend to more than one day. For example, papers such as the Butchulla presentation "*K'gari Future with the Native Title holders*" the "*QPWS Values-based Management Framework*" and Maria Zann's paper on the corals and character of Great Sandy Strait deserved to be more than just information sessions.

The afternoon session kicked off with a provocative presentation on "*Handling the Hordes*" outlining lessons observed in other natural World Heritage sites around the globe. Then there were two fascinating panel sessions — *Citizen Science* and *Tackling K'gari's Invasive Pests*. While the former is a field we have just begun to scratch the surface with it was helpful to have insights being made into manging the threats to K'gari's natural integrity

FIDO thanks particularly Maria Miller for her diligent work and attention to detail in conference arrangements. Unbeknown to FIDO, her husband underwent heart surgery just two days after the event to which she contributed so much energy.



The panel session on Citizen Science at the TT&T Conference discussed weather stations, the Fraser Island repository, the Eurong nursery, fungi and plant observations from the BioBlitz and community art

One very positive aspect of the conference was the strong Butchulla participation and interactions. The University of the Sunshine Coast has offered to provide a venue on its Fraser Coast campus for the 8th Biennial Conference in 2019 that we hope will be built around the themes of *Community, Culture and Collaborations* (C,C&C). FIDO has invited the Butchulla Aboriginal Corporation to collaborate with us to develop the next conference to be as successful as "T,T&T" was. For more details of the conference see: <http://fido.org.au/conferences/time-tide-and-tourism/> and photos at: [get.google.com/albumarchive/106668843048738450637/album/AF1QipPIE6rhuCyXs0S4htWQV1-7hQzP9JEA-s5skf73](https://www.google.com/albumarchive/106668843048738450637/album/AF1QipPIE6rhuCyXs0S4htWQV1-7hQzP9JEA-s5skf73)

Playing With Fire

MOONBI 135 discussed the significance of rainfall records and trends and the importance to have a more comprehensive picture of rainfall distribution across Fraser Island. The value of such on-the-ground data is demonstrated when we came to review what went wrong with the catastrophic fires that were lit by the Queensland Parks and Wildlife Service at the onset of yet another hot and dry El Nino.

This review needs to be prefaced by a few clarifying statements:

- Fire is an integral part of the Australian ecology. Our ecosystems have evolved to cope with fire and need some fire to sustain them.
- For these reasons FIDO supports ecologically based management burning on K'gari.
- Managing fire in the natural environment is both an art and a science. Aboriginal fire management was a fine art that evolved over the millennia. It was practiced without instruments to measure conditions or with knowledge of drought indexes. If they got it wrong it could be calamitous. They didn't have helicopters and fire-trucks to control the fires they lit.
- Fire is not to be under-rated for its potential harmful impacts nor should it be played with.

It wasn't surprising then that FIDO's antennae should start twitching with some unease when we noted public notices and in the media that the QPWS rangers were carrying out planned burns on Fraser Island in late July when our on the ground observations suggested that it was far too dry and dangerous to be lighting up the bush. Even more alarming was the indication that these planned burns could continue to September.

During our 10th and 15th September working bee we saw at first hand what could go wrong with bad timing of a management lite fire. A fire started at Ungowa as a management burn had got out of control, During the week we were there it burnt its way right across the island to Eurong, jumping many roads and containment lines in the process. As it burnt its way around Lakes Birrabeen and Benaroon it was classified as a wildfire. For much of that period it was fanned by a variable but predominantly westerly wind .

Table 1

1971 Eurong Rainfall and Average for nearby Double Island Point			
Month	Eurong Total	Number wet days	Double Island Point Average
June	61.2	14	117.3
July	34	4	83.4
August	25.2	2	63.2
September	9.6	2	50.5

A study of the data though indicates how dire the situation was by the time the management burns got into full swing. There were only one fall greater than 20 mm (23.4 on 15th June and two other falls that exceeded 10mm. This made for extreme dry soil moisture by mid August.

The fires have not gone unremarked. The Fraser Coast Chronicle reported on 17 August that a fire was occurring around the Eurong Tower Access Road. On 2nd September the same paper noted that "controlled burns" on Fraser Island have laid a smoky sheet over Hervey Bay"

John Sinclair' response to his Doctorate

I am greatly honoured and deeply humbled to receive this award from the University of the Sunshine Coast. I hope that it will be seen not only as a recognition of my role in stopping sandmining and achieving World Heritage recognition but also of my contributions to environmental protection in the 25 years since.

Receiving a doctorate means so much to me. When my elder brother was called up for National Service in 1955 at age 15, I left high school before I had finished my Junior year to replace him as a grease monkey in Dad's service station. The academic credentials I achieved since that was a challenge and a hard slog while I courted, married and raised three amazing sons plus actively engaging in so many extra interests especially and increasingly in conservation.

I never came top of my school class. So, for a person who can't sing in tune, dance without tripping on something, and who lacks any significant artistic talents or sporting ability or indeed many talents, receiving a doctorate from this university which I hold in such high regard is one of the richest rewards of my life.

I have been blessed with a wonderful family and a wide network of friends and collaborators who have mentored me and helped me overcome so many obstacles and handicaps. If I have any advice to anyone, it is to choose your friends carefully and never be too proud to seek their advice.

My main talent apart stepping on toes both on the dance floor and in the political arena has been to maintain my passion and commitments to causes and a determination to follow through despite personal cost. In the process I have discovered a richness in life that exceeds anything that wealth can buy.

Because I was involved in so much risky litigation around my Fraser Island role that could potentially bankrupt me, at age 35 I divested myself of all personal disposable assets to ensure that at least my young family was secure. Becoming a man of straw was incredibly liberating. Because I had nothing personally to lose I was less constrained and more adventurous. Although I owned no tangible assets for the next 30 years, I continued accruing a wealth of new experiences, friends and knowledge that I found far more rewarding than owning possessions.

Stepping outside my comfort zone and following uncharted paths to help advance the public interest opened my eyes and enabled me to discover and explore a wide range of disciplines. To make the best use of these I had to do so much more than just dabble. I had to set about applying them. Thus I discovered a range of new skills that enabled me to keep up with the latest in learning and technology although with the rapid pace of developments of the latter, I am now beginning to have difficulties there.

I was fortunate to inherit a cause almost from birth. My parents' love affair with Fraser Island (Kgari) began with their honeymoon there and continued to their death. Thus given my predisposition to conservation it was just natural that I would be drawn to the Fraser Island cause to protect it. Others may describe it as a calling.

K'gari Pandanus Dieback Collaborative — A Cyclone Of Support

Joel Fostin

The community and government agency support and collaboration to protect K'gari's battered Pandanus populations from the unintentionally introduced Pandanus leafhopper has been nothing short of astounding!

A project was voluntarily initiated, utilising a crowd source platform for funding requirements. The primary focus was to perform lifesaving hand intervention of mature, reproductively crucial pandanus in the most severely affected areas, whilst also collecting data and additional research, valuable for future management decisions. Support came from far and wide, a list of hundreds of kind hearted, environmentally conscious people, too long to possibly include. However some of the key collaborators and supporters need to be acknowledged.

The FIDO organisation has been long term supporters and collaborators for previous pandanus dieback mitigation works initially providing assistance and support for initial releases of the biological control (parasitoid wasp), and recently a generous donation which provided the necessary financial 'kick', making the project become a reality.

Full respect and acknowledgement needs to be expressed for QPWS Principle ranger and NRM rangers assigned to the complex pandanus dieback issue (and for orchestrating this collaborative project contract, approvals and in-kind support). These rangers as well as tens of lower ranked staff have passionately and diligently worked within their professional (and often personal means) in support of dieback management efforts, right from the onset of wasp rearing and releases across the Island.

The Butchulla PBC provided the official approval necessary to carry out the hands on work, and various respected elders and passionate members from the Butchulla community offered personal support and assistance.

The kind hearted and generous managers and staff from Cathedrals on Fraser, provided both practical, functional and aesthetically ideal accommodation during the project.

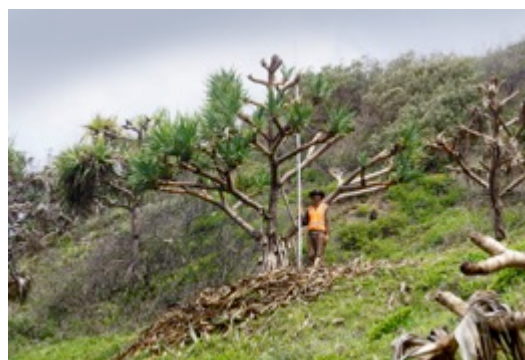
Many individuals generously and compassionately donated upon learning the plight of K'gari's Pandanus, including a large contribution from a locally based environmentally friendly fashion accessories label Eco bling. Many Coast Care and environment groups helped raise awareness and funds; to name just a few: FINIA, Noosa Biosphere Association, Coolum and North Shore Coast Care, various Tourism Businesses, and an immensely long list of big hearted people assisting with everything from video production, web page design, to personal support and encouragement.

A brief video thanking all supporters while on site can be viewed on the Pandanus dieback education and information page:

Amidst the blows of x-tropical cyclone Debbie, the project kicked off with 5 volunteer workers: wildlife photographer Mike Drinkwater, Brett- all round assistant and a previous FIDO weeding volunteer, and Brian and Isaiah from The Palm Guys- the professional arborists who generously donated time and equipment.

Spot check surveys revealed just how effective the parasitoid wasp (*Aphanomerus nr. pusillus*) is at controlling the Pandanus Leafhopper, with many of the moderately affected pandanus having recovered from leafhopper damage that occurred prior to wasp establishment.

The hands-on work performed involved climbing harnesses and leaf stripping- the physical removal of dead, diseased, and leafhopper and secondary insect infested leaves from each crown.



Baseline data of leafhopper infestation levels, wasp parasitism, fire damage, and before/ after images of treatment was also collected.

K'gari's Pandanus populations are not out of the woods yet, with ongoing minor leafstrip works, regeneration assistance, continual and vigilant monitoring and wasp translocations, and careful fire management necessary to both remediate some of the damage that has already occurred and to prevent further damage.

The most profound realisation this project has demonstrated is that with literally many hundreds of heart driven passionate and professional people willing to do what it takes to help preserve the jewel of SEQ, there is no threat to K'gari's ecosystem that can't be mitigated with organised and positive collaboration.

Fraser Island Defenders Organization

President's Annual Report — July 2017

In the last 12 months since my last Annual Report, FIDO has continued to pursue projects to protect K'gari (Fraser Island) as well as continuing our strong educational, collaborative and advocacy roles.

Education

Citizen Science: FIDO conducted a Beach to Boomanjin and Birrabeen Bioblitz from 28 November to 4 December to record the biodiversity in the bioregions and the dune systems between the Southern Lakes and Dilli Village. This attracted widespread interest and was assisted by a close collaboration between FIDO, QPWS and the University of the Sunshine Coast that made a major contribution and trusts that the Bioblitz helps add significantly to its growing Fraser Island Repository in its library. The Bioblitz also played a part in FIDO acquiring five Acoustic Sound Recorders (Listening posts) that have been provided on permanent loan to the QPWS to help identify the presence of birds and frogs by their calls

FIDO has established a Nature Walk to help interpret Fraser Island's natural environment and unique values in Eurong, the most visited place on K'Gari.

Weather Stations: FIDO has established its second K'Gari on-line weather station to enable the people to scrutinize weather data for both Happy Valley and Eurong on-line in real time and is planning to install two more weather stations over the next 12 months.

Conference: FIDO continues to play a strong educational role. Plans are well advanced for the 2017 7th Biennial Conference, *Time, Tide and Tourism* on 16th August at the University of the Sunshine Coast's Sippy Downs Campus.

Publications: Four backgrounders were produced in the last year including *Balarrgan and the Timber Industry (Part 1)*, the impact of beach traffic, a history of sandmining and Ethel Richard's story. As well as producing two MOONBIs for the year, FIDO also continued with Electronic Newsletters to keep members informed on vital issues. FIDO's web site continues to be maintained by Keith Sinclair and it is a resource being widely used by students and for public reference.

Collaborations and Volunteers

Over the years FIDO has developed a number of great collaborations but each year these become stronger and more productive as FIDO works with partners on projects of mutual benefit in helping to discharge our responsibilities for protecting the natural integrity of Fraser Island (K'gari). The major catalyst for this has been FINIA (the Fraser Island Natural Integrity Alliance) which FIDO strongly supports. It is a collaboration of government, non-government and community partners.

Collaboration with the Eurong Resort and the Kingfisher Group through transport, accommodation and hospitality is extending FIDO's capacity to carry out our weed management and bush regeneration projects and establish our online weather station for Eurong. Collaboration with the Happy Valley's Fraser Island Wilderness retreat has helped maintain a home for our equipment there and a base

for our weather station there. Collaboration with the Queensland Parks and Wildlife Service is enabling FIDO to assist in expanding the capacity of the Eurong nursery so necessary since no plant material (seeds included) should leave K'gari and none should be taken on. QPWS also provides free access and ready consultations. Collaboration with the Fraser Coast Regional Council has provided us with a very significant equipment base at Eurong. As well FIDO is developing relationships with landholders who are assisting in our on-going projects. Our ever-growing collaboration with the University of the Sunshine Coast is assisting them to establish a much needed Fraser Island Repository within the Sippy Downs Library and is providing assistance and a venue for our 7th Biennial Conference. The staff of USC have been most cooperative. The financial support from the BMRG (Burnett Mary Regional Group) under its Keeping it Great program has funded FIDO's weeding and bush regeneration programs.

I would like to thank all of these partners in helping FIDO to achieve so much more over the past 12 months than would have been possible without their contributions. We also hope that they may similarly have been assisted by FIDO's efforts.

Weeds and Bush Regeneration: In the last 12 months FIDO has organized and delivered ten week-long trips for volunteers to work on the weeds in the two main epicentres of weed infestation Eurong and Happy Valley. In the last 12 months more than 50 FIDO volunteers who have come from all over Australia but mostly from South East Queensland have contributed over 2,000 hours of on-ground work. This is making a big impact and helping restore the natural integrity to those villages. We are particularly indebted to Peter Shooter for accepting the leadership role for our Happy Valley working bees that have been particularly challenging with a daunting challenge to remove Abrus weed and to Maree Prior for leading the very popular working bees at Eurong and to Suzanne Wilson for assisting to build up the capacity of the nursery. FIDO continues to fight against the accidental import of more alien species and pests and diseases with capacity to destroy and continues to promote a nursery of plants native to Fraser Island. FIDO has entered into a Deed of Agreement with the Department of Natural Resources and Mines to manage weed on about 600 hectares of Unallocated State Land (USL) in and surrounding the Eurong and Happy Valley villages.

George Haddock Track: While advancing the George Haddock Track has stalled, FIDO still has obligations for maintenance of the work established during the Friends of Parks program in 2014 when more than half the track was cleared and the first shelter established. Over Easter 2017 14 volunteers worked on our maintenance obligations. Unfortunately further work on the track has come to a standstill pending Butchulla Aboriginal Corporation approval to construct 10 sections of the 26 sections of the overall 52-kilometre track.

I would like to thank all of the volunteers who have contributed to the on-going efforts that are making positive gains.

Sustainable Transport Study: FIDO remains most concerned that visitation to K'gari results in over a tonne of sand for every visitor being moved in heavy rainfall events. FIDO has established the Barbara Winkley Scholarship to enable the University of the Sunshine Coast to fund a PhD candidate to assess all of the options to address this issue. The USC has selected Ross Waldron to undertake this study that will take three years to complete. It is hoped that the study that has just begun will help address this vexed issue including the option of a light rail solution. We look forward to a progress report at the 2017 conference.

Advocacy

FIDO has a difficult role in that it is required to speak out strongly on some issues. FIDO is still concerned about the lack of any concrete measures to stop the degradation and erosion at Indian Head (Takky Woorroo) that continues to degrade while nothing is being done. FIDO continues to advocate for World Heritage renomination to recognize both Cooloola and additional values for Fraser Island. FIDO is concerned that a proposed Colton coal mine near the Susan River, Mary River and Great Sandy Strait would be a disaster for the environment, the Ramsar Wetlands and the Global environment as coal burning continues to heat the planet.

Effects of Climate Change: FIDO holds great concerns about the effects of Global heating and climate change on Fraser Island /K'gari. The summer of 2016-17, the hottest and driest on record for the Fraser Coast, took heavy toll on the natural environment. Several dominant plant species are at the northern limits of their range and for the second time in three years many plants died due to the extreme weather.

FIDO continues its role of consultation through the Community Advisory Council meetings and processes that have at last begun again after being stalled for a year.

FIDO wishes to continue to work with the Butchulla people in extending and finishing the extension to the Great Walk and in protecting this marvellous island we all love and respect. FIDO acknowledges the huge task facing the new Provisional Body Corporate (PBC) since the gaining of Native Title and hope we can continue to work with them as we have done in the past.

Political change: Reintroducing environmental protection measures in Queensland by the Palaszczuk Government has continued to be a battle within the government and society. It seems the government is split over the need to stop the Adani mine and bring in new laws to limit tree clearing.

The Executive: The Executive meets monthly and increasingly communicates electronically on key issues. I want to thank John C Sinclair, John Davey, John Cruickshank and Saren Starbridge (Vice Presidents), Marie Prior and Peter Shooter as well as our growing army of volunteers. Special thanks go to John Sinclair (Snr), and Jane Enchelmaier for the time they put into the running of the organization. Thank you all.

The need to protect wild places is ever greater with the present political climate and with the growth of population and the pressures this brings to places like Fraser Island. FIDO's work is ever more challenging but now we have the chance to further the prospect of bringing light rail to K'gari.

Colleen Enchelmaier
President

Fraser Island Defenders Organisation Office Bearers 2016-17

(All were re-elected at the AGM on 29 August)

President: Colleen Enchelmaier

Hon Secretary/Honorary Project Officer: John Sinclair

Treasurer: Jane Enchelmaier

Vice Presidents: John C Sinclair, John Davey, Saren Starbridge and John Cruickshank

Sustainable Transport Options Study

Ross Waldron began his three-year PhD study to determine sustainable transport options for K'gari in July. His focus is how to minimize the various impacts from 4WDs. He will be investigating more sustainable transport Options with a view to maintaining visitor amenity while minimising environmental impacts and preserving the island's uniqueness for future generations. Ross invites Email contact: Ross.Waldron@research.usc.edu.au



FIDO working bees aren't all work and no play

The Eurong Nursery

The collaborative program between FIDO and the QPWS to develop the Eurong Nursery to provide a stock of locally sourced native plants continues apace. Volunteer Suzanne Wilson reports the diversity of plants being increased starting with 14 species in October 2015 to 38 species in July 2016 and 53 species in July 2017 with 100s of plants potted up — and the momentum continues with now more bench space available.

FUNGI ON FRASER ISLAND

There is great scope for research on K'gari fungi. Until the BioBlitz only 230 previous records of fungus had been registered representing 100 species. As a result of the BioBlitz 74 records were registered adding 20 species to the Fraser Island list. It still falls well short of the 500 – 800 species expected to be discovered leaving scope for a lot more study. The best time to study fungi is in Autumn.

Correction to MOONBI 135 article on ex-HMAS Tobruk

The location for the dive site is between Bundaberg and Hervey Bay and is still being finalized to ensure no environmental impact on Hervey Bay waters. The site aims to have minimal impact on existing shipping, commercial and amateur fishing activities.

The dredging works referred to in MOONBI 135 have been completed to ensure there is sufficient depth to berth the ex-HMAS Tobruk in the Bundaberg Port Marina. 15,000 cubic metres of material was taken from the Bundaberg marina basin so that the vessel can be moved to the area in preparation for scuttling work and removal of materials.

One Man's One-person Bioblitz

By John Sinclair

This article is published at the request of the FIDO Executive to illustrate the value of BioBlitzs and dedication.

Jim Gasteen died in Lismore last August. His 95 years were full of adventure and accomplishments. I have always remained full of awe for this remarkable largely self-educated bushman's achievements. He conducted 33 one-man bioblitzs over every corner of Queensland that resulted in 33 reports recommending the protection of outstanding natural sites more than half of which are now National Parks and many others have other protected area status. His legacies include the Border Ranges Nation Park (NSW), Currawinya Lakes, Lawn Hill and the Channel Country but his major legacies are his old home property of *Thrushton*, and other mulga parks as well as many of the National Parks in the sandstone Central Highlands.

This remarkable legacy is the product of Jim's love of the country and his desire to see as much of it as possible protected for future generations plus an amazing dedication to this self-appointed task that led him on many lonely adventures as he worked on his one-man BioBlitzs. Jim had a remarkable knowledge of the whole state of Queensland. Jim spent his most formative years growing up in South West Queensland on sheep properties in the mulga lands around Bollon and St George where he not only learnt the rich craft of bushmanship but fine tuned it to a love of Nature with special expertise. Jim wasn't a person who took from the land whatever it could yield. He learnt to understand soils and ecosystems and to treat the land respectfully. It was that understanding that later helped him pursue his most passionate quest to protect as much of it as was possible.

Jim chose his target areas for bio-blitzing with uncanny judgement and a lot of research. He would scour the mountains of maps in the back of his West End dry-cleaning shop to identify areas he thought were worthy of investigation to ascertain their National Park potential. That was the easy part.

Once he had determined an area to investigate this bushman extra-ordinaire would load up the back of his Mainline ute with his trail bike, a swag and tucker and set off from Brisbane at his own expense. On arrival at his destination, he would leave the ute at his campsite and set off on the trail bike to investigate and map the soil types and what was growing there wherever his two wheels would carry him. If he couldn't identify a plant he would bring back specimens in his plant press and take them to the Herbarium to be keyed out. He built up the most comprehensive bio-geographical picture of the area being investigated. When he had gathered his raw field data he would return to the dry-cleaning shop where he would spend weeks at the back of the shop poring over his submission between attending to the disrupting customers who came in to drop off or collect their apparel items. Therese McCabe accurately described *the work area behind Jim's dry-cleaning shop counter in West End as similar to a curtained off espionage cell full of information which the then (Bjelke-Petersen) government did not want you to have.*

Jim wasn't all about just locking up reserves at any cost. He worked indefatigably to gain the goodwill and support of the neighbouring landholders before submitting his proposals. The sheer genuineness of this gentleman bushman was

legendary. He was non-judgmental and rarely made enemies. Once when he was charged by a wild boar and knocked off his trail-bike and left with a bone in his leg protruding through the skin he made an excruciatingly painful ride back to the Mainline ute (with a flat tyre that he changed) and drove alone into Taroom. It was an agonizing 12-hour plus ordeal but Jim won many friends in the bush because even in that condition he closed every gate behind him.

Jim made an enormous contribution that made to the expansion of the Queensland's National Park estate during the 1960s and 1970s. Although he left school at the age of 14, this largely self-educated bushman prepared the most meticulous nominations for national parks. His body of work is worthy of a PhD but this humble and unassuming man never blew his own trumpet

Throughout all of his life Jim was a family man as anyone who has read the published Part One of his autobiography, *Under the Mulga*, would appreciate. For more than 70 years he has had the backing and support of his equally committed wife, *Moodge* to help him. Even longer than that he has had his parents and brothers. While Jim was a reluctant shop keeper for the family dry-cleaning business, it was this backing that allowed Jim to work behind that big curtain and also get away back to the bush when he needed to carry out his bio-blitzs.

My first contact with Jim was as the Secretary of the Border Ranges Committee that actively and so passionately and effectively advocated for this National Park from Mt Lindsay to the Tweed Range. The Maryborough Branch of the Wildlife Preservation Society of Queensland decided to present him with a Conservation Award. I discovered that this outspoken and articulate group, the Border Ranges Committee, consisted of Jim and two mates who were happy to support Jim because they implicitly trusted him. It was probably this battle that saw the Wiangaree State forest converted to National Park that focussed Jim's mind on the many deserving but little known areas of Queensland that deserved to become national parks.

Jim was a friend of mine but I think that the significance of his contributions have been greatly under-recognised but his legacy lives on in so many Queensland's National Parks.



The Writer and Jim Gasteen at his Alstonville home 2014