FIDO's K'gari E-News No 16 (20th January, 2019)

Opportunities to help FIDO protect K'gari, Cooloola and Great Sandy Strait

Calendar of Significant K'gari events 2019

25 February Deadline for submissions on Great

Sandy Marine Park Zoning Plans

13-15 March BMRG's Australian Biosphere

Conference, Maryborough Brolga

Theatre

17-19 May Cooloola BioBlitz #2

31 August Community, Culture, Collaborations

Conference, Hervey Bay







SioBitz: A BioBitz...is an intense period of biological surveying in an attem species within a designated area. Groups of scientists, naturalists a

species within a designated area, Groups of scientists, naturanists and volunteers conduct an intensive field study over a continuous time period.

FIDO's Weed Management and Bush Regeneration Program 2019

The Commonwealth Government has now escaped direct and any indirect support for volunteer programs on K'gari (Fraser Island). FIDO was heavily reliant on this support over a dozen years but when it abruptly stopped on 30 June 2018, FIDO lost more than \$6,000 on the scheduled four working bees we conducted between July and November. FIDO has been in a dilemma about how we can continue because the weeds won't stop growing and spreading without management such as FIDO volunteers were most effectively providing.

FIDO has cut its cloth to what we can afford to continue the program. Because of the generous donations of accommodation at "Talinga" by FIDO members and supporters we can again carry out three working bees at Eurong in 2019, but alas without other support our Happy Valley activities will be reduced to just one Ester Cassia Blitz at the end of April that has already been filled by a long queue of volunteers who have previously worked at Happy Valley. However, we can only continue these programs by charging volunteers to help meet the costs of accommodation, food and transport. Without this the programs are unaffordable.

As E-Newsletter 15 said FIDO that fell below the \$50,000 per annum threshold hasn't had GST exemption. That is about to change but until then we now





EVENT DESCRIPTION

FIDO has been conducting week-long working bees to tackle the urban weeds of Fraser Island since 2005. These are both enjoyable and very satisfying projects mixing work, recreation and exploring Fraser Island to actively addressing Weed Management and Bush Regeneration in Eurong and Happy Valley. FIDO works in close collaboration with other stakeholder to control the spread of invasive weeds out of the townships into the surrounding bush where control is far more difficult.

FIDO seeks contributions to meeting some of the costs—tours, travel and catering—Happy Hours etc. Eventbrite requires a fixed price \$300. Concessions should pay the full price and seek a \$100 refund from fido@fido.org.au

Experienced leaders will direct each program. FIDO asks volunteers to contract to undertake a minimum of 20 hours voluntary work. In the downtime make excursions to explore the outstanding features of this World Heritage island. The houses we rent can accommodate up to 8.

All Eurong volunteers will be based at "Talinga", the former Sinclair family home. Work will focus on weeding, bush regeneration and building the capacity of the Eurong nursery as well as continuing FIDO's ongoing environmental monitoring programs.

The size of these very popular groups are usually 6 to 8 dependant on the number of vehicle seats and beds available. 4WD transport between Brisbane and K'gari is included as well as island tours. Accommodation is shared in a comfortable holiday house in the centre of the village where the work is focussed.

We are now seeking to fill vacancies for the following programs. People can register via Eventbrite by following these links. If the event is already full (and they fill quickly) you can ask to be placed on a **Wait List** by Emailing fido@fido.org.au

To Book: **Eurong Sunday 24 to Saturday 30 March** https://www.eventbrite.com.au/e/eur-0319-bush-regeneration-and-nursery-maintenance-eurong-tickets-55099995570

Eurong Sunday 21 to Saturday 27 July https://www.eventbrite.com.au/e/eur-0719-bush-regeneration-and-nursery-maintenance-eurong-tickets-55106471941

Eurong Sunday 13 to Saturday 19 October https://www.eventbrite.com.au/e/eur-1019-bush-regeneration-and-nursery-maintenance-eurong-tickets-55106788889

Negative visitor impacts and affected World Heritage values

FIDO was recently privileged to receive a Masters Thesis From Kristina Tiedemann who has been working diligently to assess the negative visitor impacts and affected World Heritage values. Unsurprisingly Kristina's research closely correlates with FIDO's conclusions The following is the Abstract from her well documented paper: Natural heritage creates under effective protection apart from economic, social and political benefits also many benefits for the wellbeing of humans. Natural World Heritage sites have values that are recognised by UNESCO to be worthy of international protection to safeguard these values for future generations. Tourism and increased visitation put stress on many natural World Heritage sites. Fraser Island in Australia is taken as a case study to assess the negative visitor impacts at a natural World Heritage site and to find viable recommendations to reduce the found impacts. The research first focuses on Fraser Island as a whole. before it is narrowed down to one tourist attraction, Indian Head.

The most severe negative visitor impacts on Fraser Island are erosion caused by vehicles, the degradation of freshwater lakes, pollution and the introduction of invasive species. To reduce these impacts, the management needs to become more transparent and a better communication system between the government, local communities, traditional owners and stakeholders needs to be developed. Amongst others, a visitor limitation, a zoning plan for visitor activities and rehabilitation zones, an environmental management charge and effective heritage interpretation can help to reduce negative visitor impacts



Degradation of Indian Head Takky Wooroo as a result of visitor pedestrian impacts

4WD vehicles	x	X	X
Degradation of lakes	x	X	X
Pollution	x		
Injured and killed wildlife			Х
Invasive species	x		х
Human settlement	x	х	Х
Fires	x	X	х
Damage to cultural sites	x		
Visitor pressure	x	х	х
Division of management resources	x	X	х
Climate change	x	х	х

Summary of the visitor impacts assessed by Kristina

Beating the Bitou Bush on K'gari

The QPWS has just released a paper describing how they think that they are on the threshold of eradication on K'gari of the most pernicious invasive weed of coastal dunes in Australia — Bitou Bush.

The paper on bitou bush eradication project on K'gari - Fraser Island was published this month in the journal Ecological Restoration and Management. Key points from this paper are that bitou bush has a low recruitment rate, that the majority of the bitou bush seed germinates within three years, and no germination has been recorded after 7 years. The paper highlights that the collaborative investment by many stakeholders including QPWS, BQ, Fraser Coast Regional Council, Traditional Owners and volunteers has been highly successful. The paper concludes that eradication of bitou bush from K'gari - Fraser Island within the next decade is a realistic goal.



Bitou Bush, native of South Africa, is an invader of coastal sand dunes in subtropical eastern Australia. The Fraser Island (K'gari) Bitou management programme depends on collabo-ration between many government agencies, conservation groups and organisations at management and operational levels for its success. (Photograph QPWS).

Bitou Bush was first reported as naturalised around Newcastle in 1908. The New South Wales Soil Conservation Service promoted the use of Bitou Bush from 1946 to 1968 for its rapid growth and effective ability to stabilise soils following sand mining operations in coastal sand dunes. Its range expanded rapidly to coastal Victoria and south-eastern Queensland, where there are known infestations from K'gari-Fraser Island to the New South Wales border (Biosecurity Queensland 2016). It has also recently been detected in Western Australia in 2012.

Persistence and dedication over the long term has been a key to success in control of this Weed of National Significance on World Heritage Listed K'gari-Fraser Island in Queensland, Australia. Systematic surveys and treatment show that the goal of Bitou Bush eradication is worthwhile and can inspire other such projects within the region and beyond.

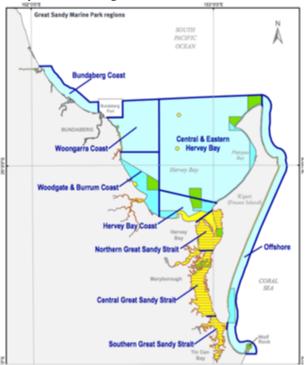
The cost of the Bitou Bush eradication program on K'gari would cover the cost of FIDO's Volunteer Weed Management programs for decades. It includes extensive ground truthing involving many personnel, helicopter surveys and more but it is vital to contain this very nasty weed.

Overdue Marine Park Review

On 14 January 2019 the Department of Environment and Science released news of its comprehensive review of the Great Sandy Marine Park Zoning Plan. It is now available on the Queensland Government's marine parks website www.qld.gov.au/marineparks

The original 2005 Zoning plan that was supposed to be reviewed in 2005 had a pitifully small percentage (3.81%) of the Marine park as a protected area,

FIDO was so outraged that we wrote in MOONBI 110, "when the plan was scrutinized it was revealed as probably the most poorly planned Marine Park in Australian history which would give absolute protection to less than 4% of the designated area and allow the exploitation of most of the remaining 96+% in some form or another. It is a clear "open slather" for 77.61% with restrictions on only another 18.5% which aren't "green" zones." We are hoping for a much more positive result for this belated 2019 review of Marine Parks (Great Sandy) Zoning Plan 2017 (the Zoning Plan). However, it will require many submissions to ensure that the Great Sandy isn't duded again.



The green area are currently the only protected area

A key component of the Zoning Plan review has been the preparation of the 'Great Sandy Marine Park Discussion Paper – Zoning Plan Opportunities' to facilitate public input into the future direction of the Zoning Plan.fThe Discussion Paper is available on the Queensland Government's marine parks website www.qld.gov.au/marineparks and the Get Involved website www.getinvolved.qld.gov.au. Further background information to support the zoning plan review is also available at www.qld.gov.au/marineparks.

Deadline for submissions is 25th February. FIDO is keen to see as many submissions as possible pushing for a ten-fold increase in green zones that are the equivalent of Marine national parks.

Zoning won't prevent Mine Poisoning GSS

While the Department of Environment and Science is looking to the onsite management of The Great Sandy Marine Park, it has no power to stop the poisonous discharges from the Colton Coal mine being released that may severely impact on the biologically richest part of the Marine Park, the Great Sandy Strait Ramsar listed Wetland of international significance.

In an irony approval for the Colton mine to proceed was issued by the Department of Environment and Science's Emerald Office, in a major hub of the Queensland coal rush and 650 kms from the Great Sandy Strait Ramsar site.

The zoning will only affect what can and can't be done with the designated zones. However if we are to protect the unique natural values of Great Sandy Strait we can't rely on the zoning stopping poisons and pollutants flowing into this world class waterway. That will require more direct action away from the waterway to prevent those toxic flows ever reaching the shores of Fraser Island (K'gari).

Where have the Christmas Beetles gone?

Remember the Christmases (not so long ago) when evening outdoor activities featured the invasions crashing cane and Christmas beetles that often crawled down one's clothing and were difficult and smelly to remove?

Remember when driving at night resulted in windscreens splattered with so many insects that special devices were sold in attempts to ameliorate the carnage on the glass?

Peter Shooter has been troubled by the dramatic decline in insect population that he wrote to the Queensland Museum seeking answers.

Their answer was: Christmas beetles are an excellent example as their distinctive and beautiful characteristics make them ordinarily very conspicuous in their hundreds thus it is noticed when they do not appear for the festive season. Others have observed appearances in great numbers of species of insects where previously they had never been observed. Any scientific studies that are occurring in this field relating to population declines will be ongoing and given the sometimes extended natural cycles of mother nature particularly animal reproduction and climate these studies will run upwards of 10 years in order to obtain adequate and defensible data. These studies are reliant on consistent and adequate resourcing (which is unfortunately not often forthcoming nor extends for the recommended life of a study). There is certainly interest in the Scientific community and a collective 'scratching of heads' by scientists globally trying to determine conclusively if there are declines of insect species. There are several suggested culprits including broad use and coverage of insecticides, urban development, removal of plant species specific to certain insects also 'light pollution'. Certainly any decline in insects would as a natural course lead to a decline in insectivores.



A Remarkable Collaboration

The Eurong Nature Walk was developed by FIDO in collaboration between the Eurong Resort and FIDO. It is a 450 metre interpreted walk between Eurong's Resort and Residential Valleys. It was crisscrossed with a number of informal tracks between the two valleys. The Resort wanted to see just one major track across and FIDO wanted to have clearer definition of tracks for weed management of this significant natural area. As well as formalizing the tracks, FIDO was keen to establish some interpretation of this piece of land that exemplified how the island was shaped and evolved by advancing sandblows.

That led to the establishment of the Nature Walk in February 2016. The Nature Walk was established to explore the sandblow in the Unallocated State Land (USL) between Eurong's Residential Valley and Eurong Resort was completed. It includes improved access to the dune from both sides, two sand ladders and

interpretative signage.



Volunteers construct one of the two sand ladders on the Nature Walk supervised by former senior National Park ranger from California



There was a grand fun opening during which the ribbon was cut with a chainsaw and the Resort supplied a high tea.

FIDO continued to maintain the track even discovering a new species of plant on the island over the next couple of years. This started falling behind during 2018 due to John Sinclair's on-going health issues. Then a new collaboration began with the Nature Walk's nearest neighbours — Nomads Backpackers.

Nomads have the sole occupancy of "Surfside", the Eurong Resort building closest to the start of the Nature Walk.

They noted the need for more maintenance to be done on the Nature Walk and set about carrying it out of their own initiative but in consultation with FIDO

Of their own initiative Nomads replaced or re-installed approx 300m of guide rope, replaced or re-installed 60 hardwood timber stakes, straightened & reinstalled about a dozen sign posts, removed branches and fallen trees from the trail, cleared weeds, and raked the entire trail to relocate the majority of leaves and sticks.

The results are remarkable as the following images depict. Furthermore, Nomads is committed to on-going maintenance and development of this Nature Walk





While Nomads will benefit because it provide an activity for their clients at their back-door, it is also used by many other K'gari (Fraser Island). There are more visitors to Eurong than any other site on the island and this asset offers visitors ongoing benefits.