



MOONBI 132

MOONBI is the name given by the Butchalla 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

FIDO's Registered Office: c/- Inns of Court, Level 2, Ocean Central, 2 Ocean Street, Maroochydore Q 4558 ABN 59 009 969 135

FIDO's Postal Address: PO Box 909 TOOWONG QLD 4066 Editor: John Sinclair, #1/32 Weston Street, COORPAROO Q 4151

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A Year of Progress: It has been a busy year for FIDO as the President’s Annual Report included on p9 indicates. It clearly defines the major initiatives being pursued by FIDO in the interests of achieving a better outcome for Fraser Island. Despite all of our initiatives Fraser Island still suffers on-going degradation including the erosion at Indian Head (Takky Wooroo), the down-cutting of the roads, the impact of alien plants and animals, the poor fire regime and climate change to name a few issues. This MOONBI attempts to provide some analysis of some of those key issues and what is and isn’t being done to address them.

Success of Sand, Sea and Sun Conference: Over 100 scientists, traditional owners, conservationists, managers and other interested participants attended the 6th Biennial Fraser Island conference organized by FIDO at the University of the Sunshine Coast on 12th August. This forum is now well cemented into the calendar and FIDO has already begun planning for its “T, T and T” (Time, Tide and Tourism) Conference in August 2017 which will mark 25 years since Fraser Island was World Heritage listed. A short summary fills page 8 but a fuller summary will be included in FIDO’s E Newsletter No 4 and on FIDO’s web site now in the process of being revamped.

Climate Impacts: Two repeated conference mentions were unsurprisingly fire and climate change. The reality of climate change impacts on K’Gari is illustrated in the Government’s projection for coastal erosion on p 6.

Addressing tourist impacts: The greatest impact of tourism is coming from the wheels of tourist vehicles and the feet of thousands of pedestrians stirring up the sand. This is causing ever-increasing down-cutting of the roads and heavily used walking paths such as on Indian Head. FIDO is seeking to address both these issues. Just as pedestrian erosion has been addressed with board-walks such as FIDO pioneered at Eli Creek, the erosion caused by vehicles can be overcome if wheels don’t come into contact with the sand. A very generous bequest to FIDO by Barbara Winkley (see p.2) has put FIDO in a position to explore where and how a light rail line on Fraser Island could be feasible and to stop further adverse environmental impacts.

Slow Progress with new Queensland Government: Anyone expecting the new Palaszczuk Government to reverse the destructive environmental policies of the Newman Government with the same rapidity as they were enacted will be very disappointed. The response to FIDO’s proposal to fund a Feasibility Study has been opposed by the QPWS which hasn’t provided any reasons for its opposition to the scheme. FIDO is also looking forward to seeing progress made towards the World Heritage renomination of Fraser Island and Cooloola to expand the World Heritage site and to recognize a wider range of values. This is Labor policy strongly supported by FIDO.

The Need to Monitor: FIDO has been carrying out some monitoring projects now for the past five years to measure sediment being washed from the roads. This has required the installation of new rain gauges. The new automated weather station FIDO has installed at Happy Valley is a collaborative effort that lifts monitoring on K’Gari to a new level. More on monitoring is featured on page 7.

Visitor Centre: FIDO received a very disappointing and negative response to our approach to Premier Palaszczuk on the need for a Great Sandy Visitor Centre. This won’t stop the issue being pursued and FIDO’s case is set out on p3.

The Impact of Native Title: FIDO’s optimism for the future of Fraser Island with the Butchulla regaining Native Title has somewhat dimmed since we have had no response positive or negative to our formally seeking native title approval for 10 short sections of the George Haddock Track amounting to less than 11 kms of the overall 52 kilometre walk.

Call for Volunteers: FIDO has three working bees on weeds in the first half of 2016 — 7th to 13th February, 20 to 27 February and 6-14 May. Anyone wishing to receive more details should contact: john@fido.org.au.

Backgrounders: This MOONBI includes the Second of a series of Backgrounders on Balarrgan (North White Cliffs) that has been a central part of K’Gari’s recorded history. The other backgrounder deals with the sad and ongoing disappearance of K’Gari’s archaeological relics, particularly scar trees. More needs to be done to preserve these relics.



Three banners gracing the stage for the 6th Biennial Fraser Island conference attended by over 100 delegates

In This Issue

Barbara Winkley Obituary; Her Legacy on Fraser Island	2
Visitor Centres Vital to Appreciate Natural Values	3
Biosecurity in Queensland and Fraser Island (K’Gari)	4
Fraser Island Ants; Bush Regenerations Operations	5
Potential erosion of K’Gari’s coast: Visitor Data is Vital	6
Monitoring for Better Management	7
Review 6 th Fraser Island conference “Sand, Sea and Sun”	8
President’s Annual Report	9

Barbara Winkley Obituary

It is a vast distance between Anchorage in Alaska where Barbara Winkley lived and Fraser Island (K’Gari) a place she never saw but yet has endowed by leaving a large bequest to FIDO. It is testimony that people can appreciate K’Gari without ever setting foot on it. It is a point so frequently overlooked by politicians and managers: that Fraser Island needs to be managed for those who only experience Fraser Island vicariously and not exclusively for those who physically experience it. Many people who don’t visit K’Gari think that all or significant parts should be vehicle free. Their position deserves better consideration.

Because of the significance of Barbara’s bequest (not expected until the first half of 2016) we thought it appropriate to let people know more about her. An Alaskan friend for an Anchorage newspaper wrote the following obituary:

Barbara Winkley was born in the area of Dorrigo in New South Wales in Australia on March 31, 1938. She passed away on May 21, 2013, in the Oregon Health Sciences University Hospital in Portland, Oregon.

Barbara loved her homeland of Australia deeply and reminisced often of her life growing up there. The family was large and they lived simply and frugally. She told of being so uncomfortable in shoes when she was a little girl that she had to take off one of the first pairs she wore while waiting for the bus for her first day of public school.

When she was a young woman she secured a position working on an ocean freighter in order to afford "broadening her horizons." She traveled extensively, working her way all around the world, having a wealth of adventures visiting many countries. In the 1960's she entered Alaska for the first time in a canoe via the Yukon River, and her love for the friends she made, the beauty of the land and its magnificent animals, led her to return to Anchorage to make Alaska her permanent home.

Her career spanned many years and a variety of skills. She worked at different times as a radiology technician and bookkeeper. Her Bachelor's Degree in Environmental Sciences from the University of Alaska in Fairbanks enabled her to do field work for several governmental agencies in the outdoors which she particularly enjoyed.

Barb was also a very hard worker: laborer positions with the Alaska pipeline and state highway construction crews were physically demanding; and in later years she became a landlord of a small apartment building she owned, and manager of a B & B she established in her lovely home on Rabbit Creek Road in Anchorage.

She was an avid outdoors person, choosing camping over lodging, fishing for fresh salmon and halibut and hooligan, picking wild blueberries and cranberries, generally preferring what the land could provide rather than a local supermarket. A particular joy for her was to then use these resources to prepare wonderful and fun meals which she would often share with friends, new and old. It was always a special treat to receive an invitation to one of Barb's "backyard barbecues." And it would often include a walk after dinner so not only could we work off some of those delicious calories, but she could exercise her dogs -- her treasured companions who were family to her.

Barb had a passionate desire to protect the world's beauty and its wildlife, and she consistently and courageously spoke out for those values in numerous governmental hearings on wildlife issues, in letters to the editor of a number of newspapers and publications, and generally in her conversations with all kinds of people. She grew increasingly

frustrated with the overly consumptive lifestyle lived in our modern culture, and gave support tirelessly for a simpler, less wasteful way of living. She was a real conservationist in the finest sense of the word, and a determined and avid activist and campaigner.

Those of us who knew her well and those of us to whom she was a new friend will certainly and deeply miss her. And I think we know that one of her parting blessings to us and to this incredibly lovely planet we inhabit for a time would be a sincere, heartfelt encouragement to continue fighting the good fight in our own unique ways, just as she did.

Barbara’s Legacy: Barbara’s estate in Australia is being shared between the Australian Conservation Foundation, the Colong Foundation for Wilderness and FIDO.



The proposed route for the Feasibility Study runs between Kingfisher and Eurong Resorts with stations at Lake McKenzie and Central Station

FIDO is seeking to use Barbara Winkley’s bequest to sponsor a Queensland Government study into the feasibility of a light rail across the island and to assess all the potential hurdles and impediments to such a visionary project proceeding if there is strong evidence for its viability and profitability. If it is viable, a private operator could build a light rail on the Government’s terms but at no cost the Government.

QPWS Opposition: FIDO is mystified over the long-standing Queensland Parks and Wildlife Service opposition to light rail. It is even more mystifying that they are most reluctant to even see a Feasibility Study undertaken. Despite the opposition, FIDO is intent on at least seeing a full pre-feasibility study undertaken. We are willing to fund this study as a starting point for more detailed discussions with all stakeholders

Doing nothing about such a self-evident problem as the accelerating down-cutting of the roads is not an option we are willing to consider. To allow this most serious degradation resulting from the on-going tourist traffic is to condemn K’Gari to lose so much of its natural beauty and natural values.

Visitor Centres Vital to Appreciate Natural Values

By John Sinclair AO, Fraser Island Defenders Organisation.

Because Visitor Centres play such an important role in elevating public appreciation and understanding of complex natural ecosystems, I have become a passionate advocate for having a world class Visitor Centre for Fraser Island.

Having seen Visitor Centres in all other states and many overseas countries, I am appalled at the lack of Visitor Centres in Queensland national parks and at how poorly those visitor centres that Queensland does have compare with their interstate counterparts. There are a few great Visitor Centres in Queensland but the Queensland Government has not developed these. Rather community and commercial interests developed them, albeit with strong local and state government support.

If anyone wants to appreciate good National Park Visitor Centres, they need to look at Tasmania and the Northern Territory. I never cease to be impressed by the Visitor Centre in the Desert Wildlife Park or the Cradle Mountain. Both of these provide unforgettable vistas looking out into the natural environment being protected. This is why Maaroom is my preference for siting a Visitor Centre for Fraser Island and Great Sandy Strait. Apart from that, Maaroom is also much more accessible than has been hitherto appreciated.

In Queensland I have been particularly struck by some Visitor Centres. The Visitor Centre for the World Heritage Riversleigh Fossil Fields is located in Mt Isa about 200 kms from Riversleigh. It is privately run and seems to have been created through a local government initiative and is supported by admission fees (\$12.00 per adult with concession prices for pensioners and children).

The Age of Dinosaurs Museum has a spectacular 1,800-hectare location atop a large mesa 20 kms outside Winton. The land was donated to the foundation. It is such a “must-see”, that it causes people to stay an extra day in Winton. What is interesting is that it has been built by a private foundation in a collaborative effort supported by \$500,000 Queensland Government’s Q150 Legacy Infrastructure funding, \$500,000 from Winton Shire Council plus more funding from other sources. The foundation now is mainly financially self-supporting but is looking everywhere for more funds.



The Age of Dinosaurs Museum in a spectacular location 25 kms from Winton is run by a not-for-profit foundation

Queensland’s Outback has a number of Visitor Centres of sorts. However almost all are associated with Historical

Museums almost all of which receive some funding and support from local and state governments. Some though are much more ambitious but they are so successful that they are now vital to the economies of some Queensland communities. For example, Longreach has the Stockman’s Hall of Fame and the Qantas Museum while Barcaldine has the Workers Heritage Centre and Blackall has its wool scour. All of these are focussed on history. All have received government funding to help establish them. However there is no reason why Visitor Centres that are explaining and presenting natural history should not receive the same level of public support.

The Great Barrier Reef Aquarium in Townsville is the effective Visitor Centre for this large World Heritage area. It does focus on presenting the natural history story. It is so interesting that it causes thousands annually to extend their Townsville stay by a day. However this Visitor Centre opened in 1987 as part of the Bicentennial Commemorative Project that means that the establishment was paid for by the government. Visitors now pay \$28 per adult to explore this amazing facility and it provides a wonderful experience.

Having explored so many Visitor Centres during my 25 years leading GO BUSH Safaris to every state in Australia, I have long deliberated on what sort of Visitor Centre is needed for Fraser Island. I am not in favour of siting it on Fraser Island and I note that many Visitor Centres that really work, such as the Great Barrier Reef Centre or the Riversleigh Fossil Centre, aren’t located within the areas they are interpreting. My preferred site for the Fraser Island visitor Centre is Maaroom. It is close to Maryborough and only 5 kilometres from the Cooloola Coast Road. However it offers spectacular views of the Ramsar listed Great Sandy Strait and across the water to World Heritage listed Fraser Island. It is one of the best bird-watching sites in Queensland for migratory waders and it offers no distractions to appreciating the natural history.



Maaroom on Great Sandy allows easy access to such a large assemblage of trans-equatorial shorebirds

Biosecurity in Queensland and Fraser Island (K’Gari)

As everyone who has entered Australia (including Johnny Depp) knows, Australia has very strict biosecurity laws to stop the importation of new pests and diseases that could impact very heavily on Australia’s rural economy and public health. The imminent implementation of Queensland’s new Biosecurity Act 2015 scheduled to come into effect on 1 July 2016 will have far reaching consequences for primary production and health.

The new Biosecurity Act replaces much earlier legislation including the Quarantine Act of 1908. The new regulations have potentially significant environmental benefits. The Fraser Island Natural Integrity Alliance (of which FIDO is a part) is hoping that Fraser Island might be given special consideration because it is easier to be isolated from a range of alien pests and diseases. While Fraser Island (K’Gari) can’t isolate itself from climate change and some windblown pests (e.g. Jamella) and diseases (e.g. Myrtle rust), it is possible to improve the biosecurity. If people had bothered to take note of the arrival of cane toads on the island, it may have a healthier ecology now. Alien ants are destroying the ecology of Christmas Island and rats are responsible for extermination of many bird species on many islands. Similarly the impact of Phytophthora (soil-borne fungi) that isn’t on K’Gari could be devastating if it arrives. Articles in MOONBIs on biosecurity for too long have been about ants.

A robust biosecurity system is important in helping prevent the entry and establishment of invasive species likely to harm Australia’s natural environment, agricultural systems, community health and economy. Scientific evidence and advice plays an important role in our biosecurity system to help us make the right decisions, at the right time, to achieve the best results.

Definition: Biosecurity covers a range of issues caused by a pest, disease or contaminant that is, or is likely to become, a significant problem for human health, social amenity, the economy or the environment.

General Obligation: Queensland’s new biosecurity laws will make everyone responsible for managing biosecurity risks and threats under their control. This general biosecurity obligation means that all reasonable steps must be taken to stop the spread of a pest, disease or contaminant and the likelihood of the risk causing a biosecurity event and to limit the consequences of such an event.



Most Pandanus along the foredunes between Happy Valley and Eli Creek devastated and killed by the Jamella impact

Proliferation of Weeds

37 Weeds in 1991: Only 40 species of exotic plants were among the detailed list of 662 species of vascular plants when Fraser Island was nominated for World Heritage in 1991. By 1997 the plant list had grown to 786 but the number of alien plants had grown too.

103 in 2004: In 2004 the Natural Resource Ranger on Fraser Island, Dr. Ivan Thrash, listed 103 weed species in the Pest Management Plan, all of K’Gari’s known weeds.

200 in 2015: By 2015 the number of weeds had almost doubled to 196 species. Significantly two of the worst weeds Coral Creeper (*Baleria repens* so far restricted to Eurong, and Crabeye (*Abrus prectorius* var. *africanus*) so far restricted to the Happy Valley area), weren’t on the 2004 list. They are now the most serious weed problems in their respective localities. Such introductions underline the urgent need for much stricter biosecurity on K’Gari.

FIDO and our FINIA partners are following a policy of not removing any plant material from Fraser Island and not taking any plants or plant propagation material on to K’Gari. That should avoid new introductions but we constantly hear reports that new plants are being carried to the island. Carrying potted plants runs the risks of introducing soil borne disease and exotic fauna from earthworms and ants to even small reptiles as well as potential plant diseases. Hopefully the new Biosecurity Act might help raise awareness under the General Obligation requirement for all visitors to Fraser Island being more aware of their responsibilities.

Just as important as not taking any plants or plant propagation material to Fraser Island is the importance of not allowing the weeds on Fraser Island to be dispersed any further. Just imagine if Happy Valley added Coral Creeper to its weed list and that Abrus got established in Eurong. Despite that we see people propagating some of Fraser Island’s worst weeds such as Mother-in-law’s tongues to stabilize banks. Similarly Easter cassia is being nurtured to stabilize a bank when there are alternative methods available. Singapore Daisy and Bitou Bush were brought to Fraser Island to stabilize areas of bare sand but we are still dealing with the legacy left behind. It doesn’t seem to matter that the land these plantings occurred on doesn’t belong to the planters.

Feral Animals: It also doesn’t seem to matter that domestic animals are banned on Fraser Island because some land-holders have blatantly ignored the law and openly kept cats and dogs in defiance of the regulations. The new Biosecurity Act changes the onus from obeying to obligation that bush lawyers will find hard to circumvent.

New ferals appear: While Fraser Island has been freed of feral cattle and horses and is also fox and goat free, concern is growing about the appearance feral pigs and the growing number of cats. Much more diligence is required to manage feral numbers and prevent new introductions.

FRASER ISLAND ANTS

This article is reproduced from Carol Bussey's notes published in "Wambaliman" newsletter July 2015

On April 28, 2015, a party of conservationists set out to lay baits on Fraser Island. They were peanut butter! not 1080 baits

Dr. Wayne Robinson from Charles Sturt University at Wagga Wagga was following up a previous 2004 survey on the ants inside the Happy Valley dingo exclusion fence. He, Dr Robinson has long been concerned about the impact of introduced ants on K'Gari's natural ecosystems

Ants perform a very beneficial role for the ecosystem:

- * they turn over the top metre of the soil (more so than earthworms),
- * they distribute seeds and
- * they help control termites around structures.

Fraser Island is estimated to have nearly 300 species of ants. Most species are adapted to tropical/subtropical climate. A rich ecosystem has "biotic resistance", all the niches are occupied making it harder for invaders to get a foothold.

Generally invasions by exotic ants are aided by damage to the landscape. This clearing which destroys native ants' habitats leaves the way clear for exotic ants to become established.

The Invaders: The ant specie that has invaded the Happy Valley area and Dilli Village is the Coastal Brown Ant (CBAs) or Bigheaded Ant (*Pheidola megacephala*). Coastal Brown Ants have some interesting characteristics. They are polygynous (several queens). They spread by budding - they just walk a few metres and start a new nest (therefore, called tramp ants). They are unicolonial. They do not have territories between colonies of the same specie. They tend to live in close association with humans. The Coastal Brown Ant originated from North Africa and came to Brisbane in 1908. The ants spread where soil is disturbed and in a linear manner following roads and so on. They tend to be a peaceful opportunistic ant.

Survey methods: In the afternoon, 200 satay sticks, dipped in peanut butter and tagged with pink tape, were stuck into the soil at numbered 10 metre intervals around the dingo fence. The next morning we returned to tabulate the results. The ants were identified by behaviour, size, colour and if necessary a look with an eyeglass to examine the anatomy. Some ants were very timid. The number of ants on the stick were estimated and any other species seen in the vicinity. For instance, sugar ants were in the area but did not appear to be attracted by the peanut butter but their presence was noted.

Findings: There was an immediate depletion of native ants but biodiversity has now been re-established. CBAs had spread to new areas helped by mowing and by watering the area. As native regrowth occurs, CBAs recede.

Earthquakes off K'Gari

On 30th July the first of fifteen earthquakes to be felt between Gladstone and the Gold Coast occurred in an area about 120 kilometres east of Indian Head, Fraser Island. They registered magnitude 5.7, the second largest on the State's history, down to 3.00. They were estimated to be 30km below ground. Scientists say that the seismic activity in the same spot was due to the Australian continent drifting

Bush regeneration/weeding operations

So far this year FIDO has held five working bees on weeds in the Eurong and Happy Valley townships.

Progress at Eurong: After leading 15 Working bees at Eurong since 2011, John Sinclair has passed the leadership of future Eurong working bees to Maree Prior. Her first trip as leader was one of our most effective weeks in Eurong for what it achieved. There were 14 weeds that were the subject of major focus and another 21 weed species that were dealt with incidentally during the course of the week. The worst and most threatening weed in Eurong is Coral Creeper, a garden escapee that has escaped into the nearby bush. Because its seed is wind blown and it seems to be confined to Eurong, this is our top priority weed. We think that we are getting on top of the Coral Creeper that had spread beyond the dingo fence. The report of the areas covered are described in the diary that can be found on FIDO's web site where it may soon be easier to find as our web site gets revamped.

Happy Valley: Peter Shooter continues his amazing effort with many teams in the Happy Valley area where they are being challenged by a very aggressive weed, an alien Abrus that is proving to be almost impossible to control by manual means. As a result Peter and his sturdy team of volunteers are donning 15 to 20 kg backpacks and lumbering up steep dunes to arrest the spread of this pest. They have been hard and challenging weeks but Peter can see light at the end of the tunnel. Mind you the teams have enjoyed some great recreation at Happy Valley. Peter has reported that it was the best team he has worked with yet because there were four men to carry out the spraying work. One of the volunteers has sent photos in from the monitoring sites that shows the dramatic improvement in the last two years as the Abrus infestation continues to shrink. My assessment on 12 July is that Peter & Co are getting on top of it. The burning program undertaken this week while not as effective as hoped might help future work. Peter's work also extended to clearly identifying Aboriginal artifacts, canoe and gunyah trees that the QPWS was oblivious of.

How many plants? When the Great Sandy World Heritage nomination was prepared it listed **622 vascular plants in 1991** for Fraser Island. **786 species were on the list by 1997.** The list in **2015 stands at 992 species.** The list could exceed 1,000 with a well-directed Bioblitz supported by FIDO and FINIA now in the planning stages.



CHANGES TO EURONG: This photo taken of Eurong in 1972 shows caravans spread over the field that was to become the site of the Eurong Resort. The sandblow at the top of the photo has been colonized by vegetation. The foredune area has extended seawards by about 50 metres and is now covered with dense shrubbery. Most of the buildings except the A-frame houses remain but many new and larger buildings infill the spaces.

Potential Erosion of K’Gari’s Coast

On 8 July the Queensland Government released maps and data anticipating the extent of sea erosion or coastal inundation by the highest astronomical tides (HAT) by the year 2100. The Fraser Coast Regional Council has a plan for combatting coastal erosion but only in the urban areas of Hervey Bay that are already experiencing significant erosion. FIDO has focused on the report’s conclusions as Fraser Island (K’Gari) will be affected. Except for Indian Head, Middle Rocks and Waddy Point which are not anticipated to erode the rest of the strip is anticipate to retreat between 135 and 280 metres.

Climate Change Predictions —A lot of coastal land loss: The report examined the whole of Fraser Island up the east coast from Hook Point to Sandy Cape and down the western shore from Sandy Cape to Moon Point. This summarizes the official verdict for erosion as shown on the maps and tables.

Hook to Indian Head: Between Hook Point and Eurong a swathe of 160 metres is subject to erosion or inundation. This strip contains the low parallel dunes. Between Eurong to Dundubara 135 metres is estimated to go. This includes Happy Valley, Yidney Rocks and smaller settlements. The swathe widens to 165 metres from Dundubara to Corroboree Beach but reaches in to 260 metres along Corroboree Beach. That will certainly impact on many midden sites. No erosion at all is predicted for Indian Head (Takky Wooroo) that could conceivably become an island at times of high tide. A cyclone on 31 December 1963 caused a sea-level rise and a big surge that washed around the headland.

Indian Head to Sandy Cape: The erosion is predicted to cut deep north of Indian Head to Middle Rocks. 270 metres is estimated to be lost there. Middle Rocks won’t be washed away but between the two reefs, erosion in predicted to impact 170 metres. The two reefs will be linked to surviving dunes by long fingers of sand. The prediction for the area between Middle Rocks and Waddy Point is almost the worst anticipated at 270 metres. Waddy Point to the campground is estimated to be affected by 200 metres tapering back to 150 metres at the former resort from where the swathe widens out again to 200 metres from the Orchid Beach airstrip to Ngkala Rocks. Between Ngkala and Browns Rocks erosion is predicted to be only 140 metres but that width is then expected double to 280 metres for the whole strip between Brown’s Rocks and Sandy Cape.

West Coast: Coming down the less familiar west coast where the coastal erosion is already increasingly obvious, the prediction are no less than 140 metres or no greater than 180 metres all the way from Sandy Cape to Moon Point. Sadly the predictions don’t enter Great Sandy Strait where there is a lot of obvious erosion as the sea eats into the cliffs from Kingfisher Resort to Ungowa and possibly beyond as can be seen by anyone taking the ferry from Mary River Heads to Kingfisher.

Mallee on Fraser Island

Reference to the mallee when explaining the Fraser Island logo raised a few queries. Mallee isn’t one species of eucalypt but rather a growth habit. Trees growing from a common lignotuber with multiple stems are mallee. This habit is not restricted to Eucalypts. Many species of the Family Myrtaceae may adopt mallee growth forms as they run out of nutrients to sustain a large central trunk especially in low nutrient, poor rainfall environments. On K’Gari Angophoras, Lophostemons and even Syncarpias can be seen adopting mallee growth forms.

Current Visitor Data is Essential

The last published data for the Fraser Island Recreation Area statistics on Visitor numbers were for 2004/05. The figures were extracted from the Reports of the Recreation Areas Management Board appearing in Annual Reports of the Environmental Protection Agency. Now in these days of alleged “Open Government” no such data is published and all requests for such data to be provided to the Advisory Committees has failed to achieve any data on visitor numbers to provide some informed advice. FIDO published the last set of available data in MOONBI 112 noting a trend over five years that is now a decade old and needs urgent updating. The public does not know the annual aggregate number of visitors nor the peak months and the proportion on Commercial tours. When we did have data we were able to comment on trends. For example, in 2006 we noted: *... a steady upwards trend in the numbers of people carried on commercial tours on Fraser Island (Up 10.7% over four years) while the number of Free and Independent Travellers (F.I.Ts), [that is the numbers of campers (down 25.5%) and the number of vehicle permits issued (down 24.3%)] is down. This requires a review of the factors because such shifts in the patterns of recreation have very important implications for Fraser Island overall management.*

Without fresh data, managers and the public have no idea whether the trends observed a decade ago are continuing still.

It is understood that gathering the data should not be difficult. Some data such as the monthly returns from commercial tour operators should make it relatively easy to at least release numbers of visitors carried on Commercial tours but extracting information from QPWS relevant to critical issues isn’t easy when it should be so readily available.



Why are the most common trees hit by lightning on K’Gari Scribbly Gums and why do most of those also have spiral grain?

Monitoring for Better Management

It is vital that the public and managers know what is occurring to the natural ecosystems of the Wide Bay and Burnett's greatest single natural asset. Monitoring is vital.

Three photos tell the sad slow story of Lake McKenzie (Boorangoora)'s slow death by sedimentation.



On 30 November 2011 FIDO installed this post on Boorangoora's shores where sand washed down from the nearby road was forming an alluvial plume.



On 13 March 2013 the lake level had risen over a metre and the alluvial plume was being spread further into the lake.



On 27th September 2015 a passer by recorded 8 cms buildup of sand at this site in just under four years. While Lake McKenzie (Boorangoora) isn't in imminent danger of filling up with the sand washed off the road, the much longer-term prognosis looks bleak unless traffic is diverted much further away from the site. Future generations will be deprived of a rich experience.

New Fraser Island Weather Station on Line

Within days of receiving this MOONBI, the new FIDO web site will be on line. The new site will be much easier to navigate. However more than any other single feature, the weather data is likely to attract more people to browse the web site than any other feature.

Happy Valley will be the fourth rain gauge that FIDO has installed on Fraser Island to provide much needed data to assist its monitoring efforts. Others are at Lake Coomboo, Central Station and Lake McKenzie (Boorangoora). However the other stations have to be manually connected to a computer to down-load the stored data. The new weather station is providing the following real-time readings on line.

- . barometric pressure (in NNN.M mbar)
- . outside temperature (NNN.M degree Celsius)
- . outside relative humidity (N %)
- . wind direction right now (in 256 steps)
- . wind speed right now (N kph)
- . wind direction of the biggest gust in the last 10 min (256 steps)
- . wind speed of that 10min gust (N kph)
- . wind speed average last 2 minutes, and last 10 minutes
- . current rain rate (in NNN.M mm/hr, extrapolated for the hour)
- . rain in the last 15 minutes (NNN.M mm; precision is 0.2mm)
- . rain in the last 60 minutes (NNN.M mm)
- . rain in the last 24 hours (NNN.M mm)

This information can soon be read at: www.fido.org.au It will help people wanting to visit the island estimate how dry the tracks may be as well as conditions for fishing.

Collaborative effort: The weather station is the result of a collaboration between FIDO, the Fraser Island Wilderness Retreat at Happy Valley that has hosted the weather station with a location and power, the Burnett Mary Regional Group that funded the equipment, a couple of technical wizards from shareware software company Opmantek and the QPWS.

K'Gari Scrutinized by Scientists

A Special Issue of the Australasian Journal of Environmental Management says it all in its title, "*Future of an Icon: K'Gari-Fraser Island, Climate change and Social Expectations*". It has been mainly contributed by University of the Sunshine Coast academics. Recommendations included:

- systematic changes in Australia's legislative system to improve potential to meet Australia's obligations under the World Heritage Convention;
- review of World Heritage listing to include values based on cultural multiplicity and diversity of Butchulla people, with improved mechanisms for economic benefit beyond involvement in management;
- cultural recognition of intrinsic value of nature to engender context-sensitive behaviours and visitor awareness through dedicated visitor centres with coherent interpretative material that clearly differentiate the World Heritage values of K'Gari-Fraser Island; and
- clear articulation of the values and purposes of World Heritage listing for management and monitoring to reduce the impact of people by applying robust and defensible measurements of the extent, severity and duration of environmental harm caused to species, ecosystems and physical values by human activities.

Sand Sun and Sea — Fraser Island (Kgari) Conference

More than 100 delegates attended the 6th Biennial Fraser Island Conference at the University of the Sunshine Coast at Sippy Downs. It was the best attended Fraser Island (K’Gari) conference yet and provided a wealth of information about the world’s greatest sand island. However the island is much more than sand as the speakers made clear and it was judged to be the best conference yet.

Butchulla Welcome: There were quite a few Butchulla who took up FIDO’s offer of free registration and we expect this number to grow even more for subsequent conferences. It was appropriate that, while the usual welcome to country is given by someone from that country and Sippy Downs isn’t Butchulla land, since the conference was dealing with K’Gari, the Butchulla traditional land, a Butchulla welcome delegates.



Delegates were welcomed by Butchulla elder **Glen Miller** a member of the Fraser Island Indigenous Advisory Committee who gave a commentary on how the granting of native Title had been needlessly protracted and frustrating to the Butchulla and had delivered so little by way of benefits beyond exemptions from vehicle and camping fees. Native title recognition was, however, a message explicit and implicit in many of the subsequent presentations, particularly that by Prof. Greg Hill who opened the Conference.

Vice Chancellor of the University of the Sunshine Coast, **Prof Greg Hill** has a long association with Fraser Island dating back to his post-graduate work. He described how his research studies whilst at the University of Queensland had introduced him to the incredible satellite imagery of Fraser Island’s “top end”. This GIS technology impressed both him and subsequently his students. However it gave him a familiarity with the island that endured during the many years when he was based in Darwin. He did note that having observed the island as a geographer, he had concern for the fire regime being implemented. Concern about fire became a recurring topic during the day.

Prof Hill outlined the University of the Sunshine Coast’s commitment to make increasingly better use of Fraser Island as a research and educational facility. He expressed some frustration that it had taken a decade for the USC to get permission to replace the bridge across Govi Creek that the QPWS had removed just as the USC took over this facility.

Keynote Address: “**More sun, more sea, more sand? Climate change and K’Gari**” was the title of the keynote address delivered by **Prof Ian Lowe AO**. **Ian has many honours including being** an adjunct Professor of USC. He was a most eloquent speaker whose depth and breadth of knowledge on his topic as well as his humour, analogies, and imagery made it a delight to listen to him. His presentation was titled and focussed on the impacts of climate change globally as well as locally on Fraser Island. Coincidentally his presentation was made more topical by the release on the eve of the Conference of the Australian Government’s lamentably low carbon emissions reductions target proposed

to be taken to the United Nations Climate Change conference in Paris. This added more relevance to his Keynote address. He spoke of the impacts that can be anticipated for Fraser Island (Kgari) and that will be more severe the further behind global governments fall in reducing their carbon emissions. Climate change was a topic that received a mention in every single presentation at the conference.

He began by pointing out that Australia’s State of the Environment Report had been sounding warning bells for decades with statements including, “*Australia has some very serious environmental problems. If we are to achieve our goal of ecological sustainability, these problems need to be dealt with immediately. The problems are the cumulative consequences of population growth and distribution, lifestyles, technologies and demands on natural resources.*” The 2011 report noted, “*Other parts of the Australian environment are in poor condition or deteriorating... Our changing climate, and growing population and economy, are now confronting us with new challenges.*”

GEO 5 more recently summarised the global situation noting that “*current observed changes to the Earth systems are unprecedented in human history*” and “*several critical global, regional or local thresholds are close or have been exceeded... abrupt and possibly irreversible changes to the life support functions of the planet are likely to occur*”.

The most sobering aspects of his presentation were that the 1980s was the warmest decade ever but that the 1990s was even warmer with every year being above the 1980s average and worse than that, the 2000s are warmer still with every year being warmer than 1990s average. The implications for K’Gari are: * *Rising sea level* * *Increasing average temperature* * *More extremely hot days* * *Increased fire risk ?* * *More severe cyclones ?* * *Habitat changes*

Ian’s Keynote cited the alarming loss of species pointing out Earth’s 6th great mass species extinction was already underway. His integrated approach to climate change is to manage what we can’t avoid and to avoid what we can’t manage. This needs to be done by: * *Monitoring rising sea level* * *Preparing contingency plans* * *Observing habitat changes* * *Preparing for cyclones* * *Developing a fire plan*

He called for an energy revolution that would reduce use of fossil fuels, develop clean energy supplies and convert efficiently to services. Prof Lowe suggested that on K’Gari the impacts of climate change could be mitigated by: * *moving toward a low – carbon energy on K’Gari* * *establishing a light rail line or network* * *Reducing the use of private vehicles* * *Limiting visitor numbers* * *Providing better access systems for visitors*

A fuller report will be on the FIDO web site

Apart from **earthquakes** some other unusual events have recently occurred near Fraser Island. Within 24 hours of a **sinkhole** opening up so suddenly on Inskip Point Peninsula and swallowing up a caravan, camp and a 4WD on 26th September a **waterspout** was observed in Hervey Bay.

President's Annual Report — August 2015

In the last 12 months since my last Annual Report, FIDO has completed, continued or pursued five major projects as well as continuing our strong educational, consultative and advocacy roles.

The three completed projects were Stage 1 of the George Haddock Track, the very successful 6th Biennial Conference and the production of a logo to help explain the island's World Heritage values. The continuing projects to help control weeds at the epicentres of infestation at Happy Valley and Eurong have made remarkable progress. FIDO is now embarking on its most ambitious project in decades to help achieve more sustainable visitation to Fraser Island by facilitating a Feasibility Study for a light rail to connect Kingfisher Resort to Eurong via Lake McKenzie (Boorangoora) and Central Station.

George Haddock Track: The work to complete Stage 1 of this ambitious project in October 2014 contributed 864 hours of on-ground work. More than half the track is now clear and the first shelter and project base is finished. Unfortunately work on the track has come to a standstill pending Native Title approval to construct 10 sections of the 26 sections of the overall 52 kilometre track. These 10 sections total 10.9 kms but without Native Title approval, the track, that mainly follows former roads where Native Title doesn't apply, can't be completed.

Sand Sea and Sun: Our conference at the University of the Sunshine Coast held on 12 August was our most successful yet attracting over 100 participants. We are indebted to the Queensland Government that contributed \$4000 to support this event and to the University of the Sunshine Coast for providing the venue as well as to all of the presenters who made the conference so interesting and so relevant.

Logo: FIDO worked with Gympie Graphics for over a year to develop a logo that we hope encapsulates the key environmental values of Fraser Island/ K'Gari and will lead to a better environmental understanding of the correlation between the soil profile and the vegetation patterns on Fraser Island. The logo is now freely available to be used by anyone wanting to promote Fraser Island and we hope that there will be a strong take up to apply this logo to help promote Fraser Island.

Weeds and Bush Regeneration: In the last 12 months FIDO has organized and delivered seven week-long trips for volunteers to work on the weeds in the two main epicentres of weed infestation Eurong and Happy Valley. The four weeks in Eurong August, February, May and July contributed 1231 hours of on-ground work which is making a big impact and helping restore the natural integrity to those villages. FIDO is indebted to the Burnett Mary Regional Group for grants making this project possible, to the support of the Kingfisher group that includes the Eurong Resort, the Regional Council and the QPWS for their support and cooperation. 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. Special mention should be made of the work of Su Dawson who has organized the food and catering for the increased number of working bees. She recently received well-deserved recognition from the BMRG. She has also participated as a volunteer in the field in 18 working bees in Eurong since 2005. Thank you Su.

Light Rail: The large and unanticipated bequest from the late Barbara Winkley is imminent and FIDO is proposing to make as the priority use of it the undertaking of a detailed feasibility study into a light rail operation on Fraser Island that will make visitation more sustainable and stop over a tonne of sand movement in heavy rainfall events. FIDO aims to work collaboratively with the Queensland Government and all stakeholders to sort out the obstacles to replacing the road in the interior of the island with a type of passenger cane train. It is an ambitious project but could deliver an enduring benefit instead of seeing the continuing degradation of the island as the roads become canyons being cut ever-deeper into the landscape.

Advocacy: FIDO has a difficult role in that it is required to speak out strongly on some issues and our advocacy has some strong opposition. However, it is a mark of our acceptance in the community that we can be opponents on some issues and collaborators on matters of shared concern. FIDO is still concerned about the lack of any concrete measures to stop the degradation and erosion at Indian Head (Takky Wooroo) that continues to degrade while nothing is being done.

Education: FIDO continues to play a strong educational role with our conferences. Four backgrounders were produced in the last 12 months. As well as producing two MOONBIs for the year, FIDO also introduced three ad-hoc Electronic Newsletters to keep members informed on vital issues such as the State Election. These will be continued.

Consultation and collaborations: FIDO continues to be represented on the Fraser Island World Heritage Community Advisory Committee and participates in Ministerial Round table meetings. FIDO continues to play a key role in the Fraser Island Natural Integrity Alliance (FINIA) that has helped facilitate closer cooperation on mutual objectives. We congratulate the Badtjula people on their achievement in the grant of native title and the wonderful celebrations they had. FIDO looks forward to working with them in protecting this marvellous island we all love and respect.

Political change: The replacement of the Newman Government that was well on the way to dismantling half a century's environmental protection measures in Queensland, by the Palaszczuk Government has given us some encouragement

The Executive: Until his death last October, Terry Hampson had served on the Executive for almost 30 years as President, Treasurer and Vice-President. He will be sadly missed. The Executive meets monthly and increasingly communicates electronically on key issues. I want to thank John C Sinclair, John Davey and Saren Starbridge (Vice Presidents) and Peter Shooter as well as our growing army of volunteers. Special thanks go to John Sinclair (Snr), project officer and secretary, and Jane Enchelmaier, treasurer, 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 Federal 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 bring light rail to K'Gari.

Colleen Enchelmaier,
President