SAVE FRASER ISLAND DINGOES INC.



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NEWSLETTER



SUMMER 2022-23

WWW.SAVEFRASERISLANDDINGOES.COM FACEBOOK: Save Fraser Island Dingoes Inc.- K'gari Wongari

PRESIDENT'S REPORT.

On behalf of the Committee I'd like to Welcome you all to our first Newsletter for 2023. We are pleased that incidents between visitors and dingoes were at a minimum. We were and still are, concerned about the impact the recent fencing off of Orchid Beach area might have on dingoes whose territory it is and to that end we are waiting on 'Right To Information' documents in order to glean any behavioural issues that might have arisen. One or two dingoes have been collared for the purpose of monitoring activity in that area.

Publicity Officer Cheryl, has an informative report on her attendance at the recent DNA final Workshop, where results of a 2 year study was, in part, revealed.

Our AGM was held early in December and further in the Newsletter Karin will bring you up to date with who is on the Committee and some of what is on our Agenda for 2023.

A member of our Surveillance Team, has some serious health issues and was unable to go to the Island personally, we wish Ray better health this year. Thanks to a lot of eyes and ears keen to keep us updated on the health of a number of dingoes, we are able to keep abreast of activity during one of the most busy times on the Island, before, during and after Christmas and well into January.

A huge thank you to Trish, who once again tirelessly and enthusiastically distributed dozens of the 2023 Fraser Island Dingo Calendars. The photos were beautifully captured by our surveillance team and the late Katerina. Also a thank you to Ayeisha Sheldon in Sweden, who designed the layout for the Calendar giving it a very professional look.

On a personal note, regarding the DNA workshop, it was a huge disappointment for Karin and myself, that we were unable to attend, but very grateful that Dr. Ernest Healy our Patron and Cheryl Bryant our Publicity Officer, who has a background in wildlife management (Taronga Zoo) were able to attend. The Workshop was held on K'gari on the 2nd of December 2022.

We would very much have appreciated a release of the findings before now, but we have been advised by Dr. Ben Allen, co-ordinator of the DNA workshops, that all will be revealed around mid this year, as to the genetic viability of the Fraser Island (K'gari) Dingo (Wongari). The take home message Dr. Healy told us, was that there is a need for concern and a plan of action was strongly recommended to be implemented, sooner rather than later.

I hope you enjoy the contents of this Newsletter, thank you to everyone who contributed and we wish you all a happy and healthy rest of the year.

Kindest Regards, Malcom Kilpatrick

SECRETARY'S/TREASURER'S REPORT.



I'd like to begin by saying a huge thank you to all who purchased Calendars, made donations and renewed their Memberships.

The funds will allow us to conduct more field trips and not only for the purpose of observing the condition of dingoes on the Island but also how the environment is bouncing back (or not in some places) from the terrible fires of 2 years ago.

I also appreciate the e-mails and letters from people around Australia who are interested in the dingoes of K'gari (Fraser Island), in particular school students whose projects are about our unique wildlife on the Island.

Accountant Janet Childs has at the time of the AGM completed the financials from 1st July 2021 to June 2022, these financials can be viewed on the Australian Charities and Not for Profit Commissions website under Save Fraser Island Dingoes Inc.

All reporting has been undertaken with Fair Trading and the Incorporations Commission, as well as all the States of Australia that require copies of our financials, which is Qld, NSW, South Australia, Western Australia and the ACNC. Victoria and Territories are exempt in our case. We are still classified as an Environmental Organisation Registered as such and therefore, still approved to be a Tax Deductible Recipient, so for any donations you make to SFID, it is tax deductible.

Best Wishes, Karin.



Annual General Meeting Save Fraser Island Dingoes Inc. 5/12/2022

<u>Venue</u>:- 50 Old Maryborough Road, Pialba, Hervey Bay Qld Meeting Started:- 10.34am

<u>Members Present</u>:- Dulci & John Lennon, Cheryl Bryant, Rosie Wilson and Dingoman, Tricia Wilton, Ray Revill, Jennifer Parkhurst by phone, Patron Ernest Healy by phone, Sue Dunbar, Nancy Sundholm, Malcom & Karin Kilpatrick

<u>Apologies</u> from June Cohen (NSW) Sally Chapman (NSW) Barbara Lynch, Heather Reid (NSW)

Malcom President of SFID, opened the meeting with a welcome to those present, Minutes from last meeting 29th November 2021, copy of which was given to members present. Minutes passed as correct proposer Karin Seconded by Tricia, stamped and signed by Malcom President & Karin Secretary.

President's Report:- Malcom Kilpatrick

Malcom acknowledged the passing of Trevor Passey a long time member and volunteer on many a project. Trevor was Assistant to Barbara Lynch as Justice of the Peace to SFID.

We also lost a wonderful friend and volunteer in Heather Warner, who worked tirelessly for all wildlife, in particular dingoes, Heather always had her hand up to man stalls on Environment Day and the Festival of Water in Noosa.

Thank you to our Vice President Jennifer Parkhurst and reporter Arthur Gorrie and to Ray Revill and Pete for their field trips on different occasions. The effort to go to the Island is enormous, weather conditions, tides, the cost of the fares and fees prevent monthly trips but we are grateful that at on average, 3 times a year, this can be undertaken.

Vice President's Report:- Jennifer Parkhurst

Jennifer presented a detailed report on necropsies that were obtained from RTI. A brief summary of the report is as follows:-

"all bodies necropsied in this selection were found on the beach, in camp zones, open tracks or otherwise obvious areas. Therefore these are only the ones we know about, possibly, many more would be hidden in the bush, decomposing out of sight" Jennifer sites a number of pups killed and stomach contents as follows:-

"Stomach contents of these pups included a lot of sand and seeds, one zip tie, aluminium foil, vegetative matter and bits and pieces of native animals, mostly skinks.

They were clearly doing it tough. Had they dispersed or were they forced out of their packs? Were they a threat to the alpha pairs about to mate"?

Publicity Officer's Report

Both Dr. Healy and Cheryl gave a detailed report on the DNA workshop held on K'gari which can be read in depth further in this newsletter.

Dingo Advisor's Report

Ray Revill raised concern over the number of dingoes, both pups and adults that are showing up with heartworm, which is spread by mosquitoes. Domestic animals are given a preventative but nothing is done for the Fraser Island Dingo to prevent death from this terrible affliction. Ray also informed us that there is an ever increasing number of illegal dumping of rubbish in the bush, this is not acceptable, least of all in a National Park.

Malcom thanked his outgoing Committee for their good work over the last year and declared all positions vacant. John Lennon was asked to Chair the Election of President, after election, the incoming president carried out the election of the remainder of the New Committee Officers.

POSITIONS FILLED AS FOLLOWS:-

PRESIDENT Malcom Kilpatrick
Moved Jennifer and Seconded Sue

VICE PRESIDENT Jennifer Parkhurst Moved Karin Seconded Ray

SECRETARY Karin Kilpatrick Moved Jennifer, Seconded Tricia

ASSIST SECRETARY Tricia Wilton Moved Karin, Seconded Ray

TREASURER Karin Kilpatrick Moved Ray, Seconded Dingoman

PUBLICITY OFFICER Cheryl Bryant Moved Karin, Seconded Ray

DINGO ADVISOR Ray Revill Moved Dingoman, Seconded Rose

WILDLIFE ADVISOR Sarah Ashdown Moved Karin, Seconded Jennifer

JUSTICE OF THE PEACE Barbara Lynch Moved Karin Seconded Ray

Patron Dr. Ernest Healy

All positions accepted.

GENERAL BUSINESS

Correspondence with Dr. Ben Allen, co-ordinator of the DNA workshops advised us via e-mail, that results of the DNA testing, which was carried out in South Africa for transparency purposes, will be available by mid this year. We look forward to the report which currently is made up of 100 pages, no doubt this will be considerably condensed.

'Right to Information', have requested an extension to supply us with answers to our requests, for records of current ear tagging from November to January, Incident reports, Death register and necropsies, we hope to receive the information by end of February.

Meeting closed 12.35pm.

SFID AGM 5TH DECEMBER 2022 VICE PRESIDENT REPORT.

Please find below, summaries of necropsy reports for 2020 and 2021. There may be more reports that we have not yet received, so the following discussion may be added to at a further date. Discussion below report summaries. (if you do not wish to read the necropsy details, skip to discussion.)

2020 - 2021 Necropsy Report summaries:

4 pups and 1 adult female murdered by adult dingoes.

2020, 22 May. Eastern beach, 300m north Red Canyon (about % of the way up the eastern beach). (necropsy performed 5 months later) 3.9 year did adult female. Suspected dingo fight. Several bite marks to the neck region and rump area. Extensive internal bleeding RHS. Perforations between ribs 7&8, 8&9, fracture at ribs 8&9. Stomach contents 35% full: fruit skin, vegetation, to pieces of snake, stingray flap, maggots, sand.

2020, 10 October. Wyuna Camp zone (just south of Indian Head), high tide mark. (Necropsy performed 4 ½ months later. Frozen – defrosted.) 4 month old male pup, suspected dingo attack. No broken bones, puncture marks neck, groin and back. Internal haemorrhaging. Stomach contents 50% full: vegetation (50%), major skink, beetle, bird remains (5%).

2020, 20 Nov KBRV beachfront Kingfisher on tide line (necropsy done 3 months later. Frozen - defrosted). 4 month old female suspected dingo attack. Ribs LHS 4,5 & 6 broken . Puncture marks RHS, haemorrhaging chest wall LHS, neck. Stomach contents: 50% full: stew (capsicum mushrooms chick peas), vegetation, hair, plastic lure pieces.

2020, 23 December 1.2k north of Wyuna Camping sign (just south of Indian Head). (necropsy done 5 months later. Frozen - defrosted) 5 month old male. Suspected dingo attack. Broken ribs 4-10, puncture wounds to left front armpit, top and side of neck and skull. RS intercostal muscles torn. Blood from penis. Stomach contents 40% full: lizard, crab, fish, sand, scarab beetle, grass hopper, vegetation, prawn, slush. [Photo shows dingo seemed to die slow and in pain, legs moving back and forward in the sand]

2020, 25 December Sandy Cape (far north) 4.4k south. (Necropsy performed 2 months later. Frozen – defrosted) 4 month old male pup, Left shattered scapula(shoulder blade), L1-6 ribs broken and 8-11 ribs broken. Severe intercostal muscle lacerations and haemorrhaging, puncture marks. Puncture wound through pericardium(the membrane enclosing the heart) and into heart. Stomach contents 75% full: bird – tern head and gannet feet, crab, marine turtle egg, vegetation. Parasite: heartworm.

2021 Necropsies

6 pups murdered

2021, 20 Feb Orchid Beach ramp beachfront (necropsy done 3 days later. Frozen - defrosted). 7 month old female suspected dingo fighting with post mortem vehicle strike. Crushing injuries around throat, ribs, hind legs. Ribs 6,7,8,9 broken LHS. Stomach contents 10% full: seeds, crab, skink (whole) veg (doesn't say whether vegetables or vegetative matter) fish bones.

2021, 08 March Wathumba transfer station Orchid beach (necropsy done 5 months later. Frozen defrosted). 8 month old female suspected dingo attack. LHS fourth rib fractures, several puncture wounds, large horizontal wound to left flank, puncture wound left groin region. Stomach contents: disembowelled (post mortem). 5% full: grass, leaf matter, seeds, sticks.

2021, 1 April Wathumba transfer station Orchid beach, near fence. (Necropsy performed 4 months later. Frozen – defrosted) 9 month old male, Suspected dingo attack. No broken bones, no obvious external injuries. Tears between ribs 5&6, 7&8, 10&11, chest wall. Stomach contents 80% full: fish frames (55%), lizard, zip tie, sand, seeds, crab, vegetation.

2021, 4 April Ocean Lake Camp Zone (Just north of Orchid Beach). (Necropsy performed 4 months later) 9 month old male. Suspected dingo attack, Ocean Lake Camp Zone. Ribs 7-12 broken with muscles torn all the way through. 5 obvious puncture wounds on throat, abdomen, back and sides. Stomach contents 60% full: meat, banana skin, wet wipe, foil, vegetation (37%), peach seed, unknown seed. Stomach lacerated due to bites.

2021, 13 April Beachfront north of Cornwells Camp Zone near Gabala Camp Zone. (necropsy performed 4 months later. Frozen – defrosted) 9 month old male vehicle strike. (Particularly brutal) Skin completely degloved off left chest wall and shoulder. Large gaping wound left chest wall. Left distal humerus fracture. (A distal humerus fracture is a break in the lower end of the upper arm bone.) Right mid tibial fracture. (A break in the shinbone just below the knee.) Left fracture of metatarsal joint right forepaw. (A metatarsal bone fracture is a complete or incomplete break in one of the five metatarsal bones in each foot.) Hernia of abdominal contents. 3rd rib fractured proximally (next to or nearest the point of attachment or origin). Vertebral column transected (a tear within the spinal cord as a result of a significant traumatic injury) at T9 and T10 and telescoped into chest cavity. Heart destroyed. Stomach contents part full: leaves, coconut, fish frame, human hair, apple, salami wrapper, sand, grass, sticks, shammy cloth piece. [Whoever ran over this juvenile dingo was going bloody fast >>> and didn't stop.]

2021, 17 April 3k from Lake Boomanjin towards Dilli Village (necropsy performed 4 months later. Frozen – defrosted) 9 month old male,. Possible dingo attack. Significant blood loss from nose. Ribs RHS 5-13 fractured. Vomiting as dingo died. Stomach contents 80% full: large skink, seeds, leaves.

2021 22 April 2k south on the beach, of the 18k Hook Point road access. (Necropsy performed 4 months later) 9 month old male, Cause of death: suspected dingo attack. Ribs 5-7 broken left side with intercostal muscle tears (the muscles between the ribs). Right elbow puncture wound, left chest puncture wound. Severe haemorrhage left and right of neck. Severe haemorrhage and muscle maceration (the softening of a solid by soaking) right side entire length of back. Stomach 10% full: fish, grass, midyim berries, mammal tibial bone, feather. (photos show many foot/paw prints around body)

DISCUSSION:

All bodies necropsied in this selection were found on the beach, in camp zones, open tracks or otherwise obvious areas. Therefore these are only the ones we know about; possibly, many more would be hidden in the bush, decomposing out of sight. There may also be other necropsy reports we haven't received yet.

In 2020, Pups predominantly from the northern part of the island were killed. The Island was closed in March through to May due to Covid, barges were on a limited timetable. There was a massive fire which burned half the island, very severe in the northern areas, from October till December that year.

2 pups from Wyuna, just south of Indian head were killed presumably by an adult dingo: a 4 month old male pup, and a 5 month old male pup, two months apart, October and December, most likely from the same litter, during the time of the fire. From Sandy Cape, far north, December, 4 month old male pup killed. Inglisher November (fire would have still been burning and came close to Kingfisher resort), 4 month old female pup killed. Earlier, in May a 4 year old adult female was killed by another dingo or dingoes, which seems random although the island had been closed due to covid and there would have been food stress due to no tourists visiting. In all cases puncture wounds were found around neck, groin and back with broken ribs, most likely from crushing. Internal bleeding. Some attacks were particularly vicious, with torn muscles and one with blood from penis. Stomach contents comprised vegetation in all cases, with scavenged food such as stew (most probably from campers) and rubbish, including plastic lure pieces. The lure must have smelt like fish, but I imagine it would have been difficult for the pup to chew up and swallow! In one photo the dingo seemed to die slow and in pain, his legs moving back and forward in the sand.

I would be interested to know when these pups were tagged – did tagging result in killing of pups like I saw in 2008?

In 2021. On the 20th Feb **Drebid Beach** a 7 month old female was killed. On the 8th of March at **Wathumba** an 8 month old female was killed. These are adjoining territories. On the 1st April a 9 month old male was killed at **Wathumba** (near orchid beach) on the 4th April a 9 month old male was killed near **Dream Lake**, just north of Orchid Beach, again adjoining territories. On the 17th and 22nd April, just days apart, 2 males both 9 months old were killed, from adjoining territories: **Dillivitage** and **Hook Point**. February to April is just before mating season would commence, but is that a coincidence or was something else going on?

Days before, another pup was killed near Cornwells Camp Zone from a vehicle strike, which is a few k's north of Eurong.

Stomach contents of these pups included a lot of sand and seeds; one zip tie, aluminium foil, vegetative matter, and bits and pieces of native animals, mostly skinks. They were clearly doing it tough. Had they dispersed or were they forced out of their packs? Were they a threat to the alpha pairs about to mate?

It is interesting that in 2020 the pups killed were around 4 months old and in 2021 the juveniles killed were all 9 months old.

The stomach contents show us the dingoes were scavenging whatever food they could find. There is a proportion of native food, but a large proportion also of foods scavenged from humans, including human waste such as tin foil, with most having sand, sticks, and other vegetation in their guts.

These necropsies have got me wondering what the heck is going on over there on K'gari Fraser Island with the dingoes. So many pups killed, it had to be by adults due to the strength involved in tearing and shearing injuries: why? The injuries in most cases are very severe, as if the attacks were angry. As they are from 2020-2021, I spoke to Ray Revill and we both thought the fires might have something to do with it. Territorial areas would have been infiltrated by homeless dingoes, and it was puppy time, with pups possibly venturing around territories that weren't theirs. They may have wandered into other territories and been killed by the adults there. But why the brutality? Why such angry assaults?

We also thought the deaths may be due in general to food stress, as the Island was closed to tourism for a while during this time due to covid. Then when the island re-opened it has become like a superhighway with far too much traffic; hundreds of people a day visiting areas such as Eli Creek and to see two hundred cars there all parked up together beggars belief. It makes one feel physically sick. The island was not meant to be invaded by so many humans in such large numbers at one time. This would be putting stress on every aspect of the island's ecosystems, and thus the dingoes as apex predator. I think SFID needs to start pushing for tourism to be spread across the year, not so many people allowed on it at one time. Make people book, take their kids out of school during off-peak times. Only an allocated amount of people allowed there at any one time.

And to think a tourist/local ran over a dingo so dramatically that it debridied the skin off him. And they didn't stop to help. Again, what is going on over there? There is a large proportion of the visitors who are yahoos; they don't care about the island, its heritage, its delicacy or its ecosystem. They just want to drink beer, hoon around, and disregard the wildlife. What can be done about this? Cameras have been put everywhere, number-plate recognition apparently, but they COULD capture loutish behaviour. They could put web-cam type cameras around, and actually follow up loutish behaviour with fines. I feel sad about this, as K'gari used to be Paradise, where you could go for some private getaway time and just relax and enjoy yourself. Now it seems like Galag 13, wired fenced camping areas, townships fenced, camera's everywhere. Like George Orwell's 1984, Big Brother scenario. I don't enjoy going there any more and feel so blessed to have known what the island was like 20 years ago when everything was toned down, laid back, and easy going.

Meanwhile we just have to wait and see if there will be more necropsy reports released to us and hope that 1/ we don't find out there were more puppies killed in 2020-2021 than we have seen, and 2/ we don't see a repeat of the trend of deaths above, in 2022.

Jennifer Parkhurst.

PUBLICITY OFFICER'S REPORT.



I hope everyone had an enjoyable Christmas and New Year. We are now well and truly into 2023. Time really does seem to fly. It's hard to believe SFID has been operating for over fourteen years.

It has taken a lot of hard work, overcoming many challenges, to bring about changes in attitude and management. With more collaboration and transparency we can see a future for our K'gari wongari.

Of course challenges remain, not least of all the continued increase in visitor numbers and the disrespect by some individuals that put, not just our wongari, but the environment and other wildlife at risk. Another challenge going into the future is climate change and how this will be addressed.

On a positive note, there are scientists examining the effects of climate change on the Island and ongoing research is continuing into the health and conservation of the wongari (dingo) population.

A recent project just completed is a study on the genetic health of the animals. SFID has been lobbying for this research to be undertaken for many years.

The results were discussed at a workshop at Kingfisher Bay in December but are yet to be published. Although the study was conducted by an independent South African team of geneticists, QPWS still decide when and what will be released. We are still waiting for the reports...

FENCED OUT..The Queensland government has finished construction of the 7-kilometre-long dingo – or wongari — fence that wraps around the Orchid Beach township putting an end to the days when the animals roamed freely in the community. It has been a stressful time for the dingoes in that area as some had to be physically removed from within the new fence. It certainly is the end of an era. Orchid Beach has always had dingoes wandering through the township and previously without incident, but with the continual increase in tourists, unfortunately, the only way to protect the animals is to keep them away from visitors.

We know that there are some people around the Orchid Beach area who are anti dingo and there have been incidents of deliberate poisoning. (6 animals remains found in 2016.) This is an ongoing problem and concerns remain that animals are still being poisoned. Hopefully, the dingo fence will keep these people separated from the animals.

If anyone does see anything suspicious at Orchid Beach or anywhere else please report it...

HAZARD'S ON K'GARI.. While it's usually dingo incidents we hear about there are many hazards on K'gari. In recent months there have been at least ten Careflight rescues ranging from children with suspected Irukandji jellyfish stings to snake bite and roll-overs. A reminder that K'gari is a wilderness area so when visiting please stay alert follow the rules and stay safe. Happy New Year,,

Cheryl Bryant.

SUMMARY of the STAKEHOLDER WORKSHOP on the genetic health and status of K'gari wongari (Fraser Island dingoes) Kingfisher Bay Resort. 2 Dec 2022.

The discussion commenced with a recap of stakeholder questions that were put forward at the preliminary stakeholder workshop held in Oct 2020.

Ben Allen provided a Power Point presentation, this was a condensed version of the full report which we hope to obtain from QPWS when made available.

It became clear at the onset that many questions were beyond the scope of analysis through DNA testing and that more robust data would be needed if many of our queries were to be answered.

The geneticists who undertook this project were a South African team who we later spoke to via Zoom. They had been selected to ensure the project would be seen as independent and not influenced by any political agenda or factions in Australia.

There were 243 samples tested, eartips only, as hair had degraded. After quality checks the number was reduced to 143. The time period ranged from 1996 -2020.. 112 from K'gari, 7 Rainbow Beach 24 collected from other areas including 4 more from K'gari. All samples had the required metadata to enable quality testing. That is: age, sex, relatedness, location etc. of each animal.

It was discovered that only one genetic pack exists on the Island, in other words genetically they are only one family, although socially there are a number of packs across the Island. This would suggest that the various social packs intermingle and are not as territorial as was perhaps expected.

It was revealed that there was a major change in their genetic makeup after the 2001 cull. So to suggest that culling would be no danger to the population would certainly be incorrect and any major event, such as an



K'gari Wongari genetic analysis,

outbreak of disease, could have catastrophic consequences for the population.

It was mentioned that perhaps a sperm bank be considered to preserve the linage, but this was resisted by the geneticists who didn't see the K'gari dingoes as a significantly distinct species from mainland animals. It could be argued that the Island dingoes hold cultural importance to the Butchulla and since there does exist genetic differences between mainland and K'gari animals, that a sperm bank should not be dismissed.

It was clear that inbreeding occurred but since all K'gari dingoes are related, that was to be expected. It is the relatedness of inbreeding that is significant. e.g brother to sister, son to

mother, this seems to be low at this point but is likely to increase over time, therefore certainly warrants ongoing monitoring.

As mentioned, there was a major shift in genetic diversity in 2001 after the cull, and it has been declining over the years. According to the S. African geneticists it is likely the population has not reached its tolerance for inbreeding. This is not re-assuring and begs the question when is it likely to reach its tolerance and what do we do now to avoid reaching that threshold from occurring in the future?

Early afternoon we were able to Zoom with the geneticists from S. Africa, but unfortunately, the sound quality made it difficult to fully understand their responses to some of the questions. When asked about future population viability they concluded that inbreeding is most likely to increase and relatedness is predicted to change over time. It was put forward that each new generation of animals should be tested for genetic changes, or at a minimum, data collected every 5 years. It would seem logical to assume that the collection of this data would be very important to enable informed management decisions into the future.

The bottom line is that results were limited by the information (tissue samples) provided. If we want more answers we need more samples and close monitoring of any ongoing changes in the population. Therein lies the dilemma, do we continue to advocate for non interference or do we lobby for more vigorous research? Taking samples from tagged or deceased animals is not adequate to give an overall picture and, unfortunately, the only way to get tissue samples is by a capture/release program.

The workshop was another step forward and offered the opportunity for stakeholders to express their concerns and openly discuss issues regarding the genetic health of the dingo population. The DNA study was an important part of this process, The next step falls to DES (Dept of Environment and Science). The success of the workshop will depend and be determined by the management decisions that are now made to ensure the future of a healthy, viable dingo population for the next generation and generations to come.

(If anyone wishes a more in depth analysis of the methodology used by the S. African genetics team it should be available when we receive the full scientific report.)

HEARTWORM UPDATE. QPWS and DES are aware of the prevalence of heartworm and are discussing management options. There is a 5 year vaccine that is currently under development but is not available at present, Whether QPWS plan to use this vaccine in the future is unclear. Therefore at this time no preventative action is being taken.

Cheryl Bryant.

ORIGINS OF K'GARI...



There has been much speculation about when, and how, K'gari (Fraser Island) was formed.

A team of scientists led by Daniel Ellerton of Stockholm University and Professor Jaimie Shulmeister, previous Head of School at the University of Queensland, have provided the first look at the island's geological age. The scientist's dated sand dunes on the east coast of K'gari and Rainbow Beach.

The earliest ages suggest K'gari is almost 900,000 years old. It's formation was tied to a major change in earth's climate called the Middle Pleistocene Transition.

K'gari's rise appears to have coincided with changes in sea levels caused by a dramatic shift in the climate about 1 million years ago. The findings also suggest the island played a key role in the establishment of the Great Barrier Reef.

Every year, around 500,000 cubic metres of sand is transported up the east coast of Australia from rivers such as the Hawkesbury and Hunter.

As it is pushed north by south-easterly trade winds and waves, it builds around Stradbroke and Moreton islands and eventually reaches K'gari.

The island sits on a pivotal point on the southeastern Queensland coast, close to the edge of the continental shelf.



As the sand hits the island's northerly point, it slips off the edge of the shelf into deep water. If K'gari didn't exist the sand would have continued further north and stopped coral growing on what is now the southern and central parts of the reef. What K;gari is doing is essentially forming a seawall. Dr Ellerton said.

To start with, the researchers used a technique known as optically stimulated luminescence, which dates the time that individual grains of sand last saw light

The ancient sands along the east coast of Australia are perfect for this technique, Professor Shulmeister said.

Normally, the technique yields ages of up to 200,000 years, but samples taken from Rainbow Beach and the Fraser Island Cliffs returned dates concentrated between 700,000 to 800,000 years, with the oldest around 1.2 million.

To make sure the dates were accurate, they used another technique known as paleomagnetism, which analyses the alignment of iron nanoparticles in relation to the Earth's magnetic poles.

Around 773,000 years ago, Earth's magnetic poles flipped so particles dug up from layers below what is known as the Matuyama/Brunhes boundary, lie in a different direction to those above.

"This kind of analysis is very difficult to do with crumbly sand, but the cliffs of Rainbow Beach also contain a harder substance called ferricrete — iron that has washed out of the sand and set like concrete.

While samples from the top two-thirds of the cliffs had normal magnetisation, particles in the bottom third were reversed. So we knew that 773,000 years was real." Professor Shulmeister said.

Layers in the cliffs, particularly those around Rainbow Beach that were the same age and part of the same system as those on K'gari, reveal how the island developed.

"Rainbow Beach is very unique," said Dr Ellerton. You get to see the oldest material at the bottom all the way to the youngest material that's at the top and you can just stand there and see it for the entire length of the beach."

While the bottom of the cliff is dominated by vast sheets of rippled sand known as transverse dunes, the top two-thirds contain large parabolic-shaped dunes like those on the island today.



Up until around 1 million years ago, Earth cycled through glacial periods every 40,000 years in line with variations in its orbit, causing sea levels to rise and drop by 60–80 metres.

But suddenly at a point known as the Middle Pleistocene transition, the glacial cycle changed to 100,000 years, and sea level oscillations doubled to more than 120 metres.

"That's the same climate system that we currently know of and what we experience in the modern time period," Dr Ellerton said.

The team believe this unexplained transition may have triggered the formation of K'gari.

According to their hypothesis, the sudden drop of sea levels exposed sand stored on the continental shelf that was then bulldozed up into massive sheets as the sea rose again

The island grew in pulses over hundreds of thousands of years as the sea levels returned to modern levels after each period of glaciation.

As time went on, there was less sand on the continental shelf to be pushed up, swamping everything in its path.

"That's when we start to see parabolic dunes," Dr Ellerton said.

Old dunes were eroded and blown inland through gaps in vegetation, producing the parabolic shape.

"If you look on K'gari today, some of the parabolic dunes are 10 kilometres long," Dr Ellerton said.

"They are eroding and moving old material successively over time, as opposed to what we see at the base of the island and Rainbow Beach."

Oceanographer, Helen Bostock said "There's a lot of work still to do, but I think this is an interesting hypothesis we can test going forward."



CRAB POT DANGER TO WILDLIFE.



A young dingo was recently rescued after being trapped in a crab pot on K'Gari (Fraser Island). Rangers on the island heard its distress calls coming from the mangroves, and found the dingo stuck inside with a large mud crab against a rising tide.

Ranger-in-charge Linda Behrendorf said "The dingo hurried off to re-join his pack, and it is extremely lucky to have been rescued instead of drowning in the crab pot when the tide came in. Fishers should ensure that their crab pots are always submerged.

Crab pots left unattended or exposed pose a danger to marine life and wildlife on K'gari. Any animal that becomes tangled in crab pots usually drowns."

She said it was unclear whether the pot was laid by a commercial or recreational fisher.

They may be called crab pots but they literally kill anything that gets trapped including dingoes, turtles and even birds. It's not the first time a dingo pup has been caught and drowned. This one was very lucky to be found...If you have to put these out be responsible. Better still, don't use them around K'gari.



A distressed dingo pup being rescued from a crab pot. Crab pots left unattended or exposed pose a danger to marine life and wildlife on K'qari.



Vale

Noelene Walk (89 years of age)

Noelene was considered to be an Icon of Fraser Island, a softly spoken lady whose passion for the Island never waned. Ron Walk, her husband, was head Ranger on Fraser Island long before it became World Heritage Listed in 1992.

Both Ron and Noelene were very much respected and having lived on the Island for many decades their first hand knowledge was invaluable.



Not long before Noelene passed away she recounted a story to us of what she called a "naughty" dingo. She said that one day when she and a friend, also a long time resident of Fraser Island, were walking through the bush, a dingo, a young male, followed them rather closely, which made Noelene feel a little uncomfortable. She was accustomed to dingoes having lived with them for so many years, but this one was a little different.

She didn't want the dingo following them so only meaning to scare it away, Noelene threw a stick at it, but accidentally, to her surprise, pegged it on the nose, objective achieved, the dingo ran away.

When Noelene and her friend returned home from their walk, they were met with quite a sight of dishevelled and torn pillows which when they left for their walk were still nicely in place on chairs on the Verandah. One wonders what could have happened but Noelene was convinced it was that rascal 4 paws!

I will miss our chats.

Karin.





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