

Sustaining the natural integrity of Fraser Island (K'gari) together November 2020

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Welcome to the final issue of the FINIA newsletter for 2020. What a year 2020 has been – one that none of us is likely to forget for a while.

From the lows of not being able to access K'gari (or each other) during the COVID-19 'first wave' to highlights like the first Butchulla Land and Sea Ranger/Butchulla Aboriginal Corporation's Skilling Queenslanders for Work Trainees and K'gari's first Biosecurity Officer.

Congratulations and thank you to all our FINIA partners.

The Editor

Genetic Health and Status of K'gari Wongari (Fraser Island Dingoes)



Conserving K'gari's wongari (dingo) is a subject of considerable interest to a broad section of the K'gari's stakeholders – from the Butchulla community to the tourism industry. Do their genetics hold any answers for their land managers?

The conservation and management of K'gari wongari are of great interest to the broader community. Many former issues of public concern (e.g. wongari diet, health, movements, abundance etc.) have largely been resolved with an increased effort to systematically address these concerns through independent scientific evaluation and open-access publication of key datasets collected and maintained by the Department of Environment and Science, through Queensland Parks and Wildlife Service & Partnerships (QPWS&P).

However, public and scientific concern remains about the genetic health and status of wongari on the island, including the number of 'breeders' present. Formulating appropriate wongari management policy is more

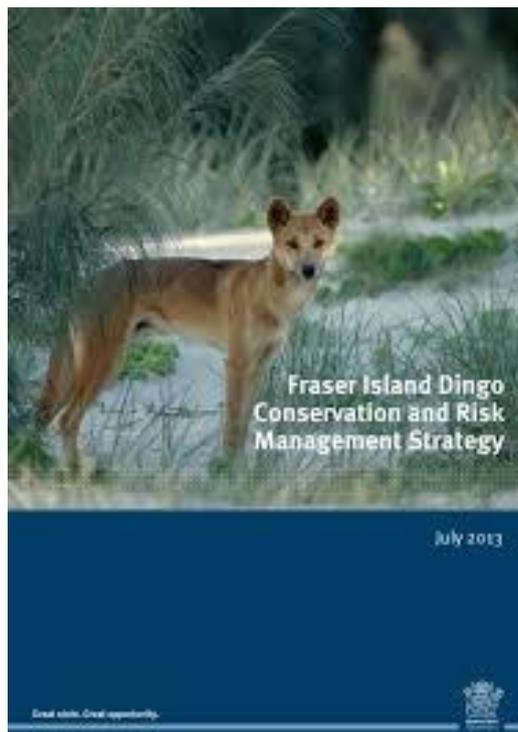
difficult without this information. The overall aim of the current research project "The genetic health and status of K'gari wongari (Fraser Island dingoes)" is to provide QPWS&P with robust information on the genetic health and status of wongari on K'gari. Information that also meets stakeholder expectations and is widely supported by the scientific community.

This will be achieved over 12 months following a stakeholder-led, expert-informed, and independent co-innovation approach that so far has included stakeholder and expert workshops, which will be followed by independent scientific analyses of existing DNA data held by QPWS&P.

The University of Southern Queensland is facilitating the project, with their key responsibilities, including:

- provision of in-kind contributions,
- overall project management,
- coordination and logistics of all workshops (including the expert workshops),
- commissioning independent analyses of samples (through UCT) and
- preparation of all project deliverables and reports.

The overall aim of the research program is to provide QPWS&P with robust, policy-ready information on the genetic health and status of wongari on K'gari – information that also meets stakeholder expectations and is widely supported by the scientific community.



Applied research and genetics will inform future management of K'gari's wongari (Fraser Island dingoes)

The primary objectives of this research program are to (1) garner a prioritised list of research questions from key stakeholders or identify which 'genetics issues' are most important to stakeholders; (2) obtain agreed, expert advice from a variety of dingo genetics specialists on how best to assess those questions based on current analytical methods and available samples; (3) have an independent provider analyse the samples and address these questions based on the agreed methodology; and (4) disseminate these results in a policy-ready format to policymakers and managers.

Project outputs will include (1) quantitative data and robust, independent analyses on the genetic health and status of K'gari wongari, and (2) a final report inclusive of three documents:

- (a) a report on the actual process and the execution of the research program,
- (b) a scientific publication for a public audience (inclusive of all participants), and
- (c) a summary document for policymakers and managers.

Together (1) and (2) of these project outputs and any other information reasonably requested by QPWS&P will comprise the Final Report.

The project outcomes will include a greater understanding of the genetic health and status of K'gari wongari, and an increased ability to manage wongari in a scientifically- and community-supported way.

Project benefits include a better understanding of the wongari management environment, improved ability for QPWS&P to articulate to the public their stewardship of, and alleviation of community concern over the management of, K'gari wongari.

Contributed by Queensland Parks and Wildlife & Partnerships

Last Chance to Book - Want to be a Weed Spotter?



The cost of weeds to Australian agriculture now exceeds \$4 billion per year. No estimate has been made of the cost of weeds to the environment, but environmental biosecurity is a rapidly developing area. Prevention, detection and early intervention are the most cost-effective means of dealing with potential, new and emerging weeds in Queensland.

Weed Spotters aim to find, identify and document those new occurrences of potential weeds at an early stage to limit impacts. It provides a community-based weed alert system in Queensland, based on the model developed by the Cooperative Research Centre for Australian Weed Management.

In partnership with the Queensland Herbarium, FINIA is hosting a FREE Weed Spotters Workshop with Senior Ecologist, Dr Melinda Laidlaw at Maryborough Town Hall from 10 am to 12 pm on Tuesday 10 November (morning tea will be provided).

If you would like to learn more about how to identify weeds, share information with the right people to attack the problem and to make our landscapes - from bushland to parks to properties better places, then why not join us. This is an excellent opportunity to learn more or brush up on your identification skills, hear about new technologies and tools or share your knowledge with others, and find out more about the support that is available to control significant weeds in high priority areas.

Weed spotters receive a weed spotters bulletin each month with information on current and emerging weeds and weed spotter activities along with a list of regional contacts. Weed spotter resources are available to assist weed spotters and coordinators with weed identification.

To register, please email contactfinia@gmail.com.

Contributed by Dr Melinda Laidlaw, Weed Spotters Network Queensland, Queensland Herbarium

Tailor Surveys: Protecting Sea Country

In August and September, Butchulla Land and Sea Rangers Myles Broome, Blayde Foley and Jodie Rainbow travelled to K'gari to assist Queensland Fisheries (Department of Agriculture and Fisheries) with their tailor fish surveys for the season on the Eastern side of K'gari.

The BLSR and Queensland Fisheries researchers sampled fish between the Maheno shipwreck to Indian Heads and around Waddy Point. They returned to Orchid Beach and assisted in dissecting the fish, collecting the ear bones (or otoliths) and storing them appropriately to take back to the lab to determine the age and sex of the fish.

Otoliths are composed of a form of calcium carbonate and protein which is laid down at different rates throughout a fish's life. This process leaves bands (alternating opaque and translucent bands) on the otolith like the growth rings in a tree.



Removing otoliths after measuring tailor samples. Photo: BLSR

This research is conducted three times a year during the tailor season. The population data is recorded and kept by Fisheries Queensland and shared with BLSR.

The rangers also conducted compliance patrols during the annual Tailor Closure and assisted Queensland Fisheries to remove the tailor season closure signs from Indian Heads to Waddy Point at the end of the closure. The closure is in place to protect tailor as they congregate to spawn, helping ensure the sustainability of fisheries stock for future generations.

During the closure, it is prohibited to take any fin fish from a point 400m north of Waddy Point to 400m south of Indian Head, and 400m out to sea from low water.

Article contributed by the Butchulla Land and Sea Rangers

Butchulla Work Ready Trainees: Skilling Queenslanders for Work



Butchulla Land and Sea Ranger Skilling Queenslanders for Work trainees along with their Supervisor, Bob Broome, work ready! Pictured from L-R: Tessa Waia, Chase Chapman, Bob Broome, Dakota Broome, Sharneeka Doyle and Jymara Burns. Inset: Raymond Burns. (Photo: BLSR)

In October, six new trainees started with the Butchulla Land and Sea Rangers under their Butchulla Work Ready Trainee Program. Dwayne (Bob) Broome will supervise the team who have been employed for 24 weeks. Four trainees, Dakota Broome, Jymara Burns, Sharneeka Doyle and Chase Chapman, are studying a Certificate I in Conservation and Land Management) with two others, Chantelle (Tessa) Waia and Raymond Burns, are studying a Certificate I in Business.

A structured work plan has been developed for the trainees. This includes practical on-the-job experience (working alongside the Butchulla Aboriginal Corporation and Butchulla Land Sea Rangers and FINIA partners such as Fraser Island Defenders Organisation on activities such as weed management, seed collection and nursery propagation, yellow crazy ant and pig management and turtle monitoring) along with formal training (being delivered through Axiom College and Yalga-binbi Institute), informal training, workshops and presentations and workplace tours.

Skilling Queenslanders for Work focuses on developing an individual's skills, supporting them to begin a learning pathway to a certificate III qualification, and providing direct assistance to those Queenslanders that need extra support to enter and stay in the workforce. The Queensland Government proudly funds the program through its Skilling Queenslanders for Work (Unite and Recover for Jobs) initiative.

Article contributed by the Butchulla Land and Sea Rangers

K'gari (Fraser Island) App

The K'gari App is a free guide for anyone planning a trip to K'gari. The App provides important information on what you need to know before you go, getting to the island and what to do when on the island. It also provides information on the natural integrity of the island, history and threats. Information is continually updated. Photos have been sourced from the John Sinclair collection, USC academics, students and members of the community.



Have you downloaded the K'gari-Fraser Island App yet?

The App has a five-star Apple App Store and Google Play ratings and has achieved 5000 downloads since its launch in 2018. The App, ideally, is a community resource, informing the community and visitors about the island, where to go and what to do. Importantly, it provides information on the need to protect K'gari, to understand the very significant and long cultural history, to be respectful and how to stay safe.

The App has become an essential teaching tool for education groups participating in field trips to K'gari. It is also used by research groups, providing researchers with links to papers housed in USC's K'gari-Fraser Island Research Archive.

The previous app licence expired in September of this year. Fortunately, an opportunity arose to transition to a new and cheaper platform with greater capability. The new platform has the potential to include more data, such as citizen science. It will also link to the K'gari (Fraser Island) World Heritage Discovery Centre (USC – Kingfisher Bay collaboration), once opened later this year.

To download the App on your Smart Phone, go to the app store and search for "Fraser Island Guide". If you already have the App, your device should have automatically linked to the new platform.

If you have material that you think would contribute to the App or any ideas on how the App could be used to collect data for Citizen Science, please contact Kim Walker at kwalker4@usc.edu.au.

Contributed by Dr Kim Walker, University of the Sunshine Coast

Update from Queensland Parks

'Galangoor djali', G' day, and welcome back. The island has certainly eased its way out of hibernation, welcoming the return of visitors back to K'gari. It goes without saying, holidaymakers are a big part of Great Sandy National Park, and after such an intense period of 'social distancing', it's refreshing to see visitors reconnecting with the environment, family and friends.

Finding a balance, the park embraced some unexpected time-out. A rare moment for the landscape to rest and regenerate... you could almost hear the sand dunes breathe a momentary sigh of relief.

Emerging from this slumber, masses of blue tiger butterflies (*Tirumala hamata*) proliferated the landscape, their intense blue wings dominating the stretches of beach, as they continued their annual migration north for the wet season.

Significant increases in visitor numbers amid COVID restrictions have sadly intensified the presence of rubbish and anti-social behaviour, including illegal campfires. These additional pressures to our pristine landscape have seen rangers busier, undertaking additional law enforcement and fire mitigation duties.

A timely reminder to plan ahead and remember to 'Leave No Trace'.

Article contributed by D.Bowman, QPWS&P, PC Ranger, K'gari

Myrtle Rust Update

In August, the Butchulla Land and Sea Rangers (BLSR), Queensland Indigenous Land and Sea Rangers (ILSR), Department of Agriculture and Fisheries (DAF) and Department of Environment and Science (DES) participated in a myrtle rust field trip on K'gari. Surveys were completed at the southern end of K'gari, around Dilli Village, Hook Point and Jabiru Swamp (where the wildfire came through late last year).

During the surveys, significant amounts of myrtle rust were found in these areas, mostly on the paperbark (*Melaleuca quinquenervia*) trees. As a result, the BLSR have established five monitoring sites, flagging and assessing 50 trees at each site. Approximately 75% of the trees surveyed showed signs of myrtle rust.

As part of their work to care for country (and to meet their goal for a healthy country), the BLSR will continue monitoring these sites to assess any further impacts or changes and work in partnership with DAF to reduce the spread of the infection on country. The next planned site visit will be November 2020.

Following the field trip, the BLSR in partnership with DAF's Dr Geoff Pegg and Dr Louise Shuey facilitated a 2-day Biosecurity 101 workshop (with a specific focus on myrtle rust) in Hervey Bay. The workshop was supported by a Fraser Coast Council Community Environment Grant.

Participants included Butchulla community members and elders, neighbouring traditional owner groups, Fraser Coast Regional Council, FINIA, Noosa Landcare and Queensland Parks and Wildlife Service.

The BLSR hope that the training will increase awareness and capacity to detect biosecurity threats. This will increase the number of people watching for pests and increase the effectiveness of reporting biosecurity activity; preventing further impacts or damage to country.

Article contributed by the Butchulla Land and Sea Rangers

Restocking the Eurong Nursery

Did you know that FIDO has a native plant nursery on K'gari?

Situated at Eurong, the nursery was established to encourage the landholders to replace their introduced garden plant species with native plants.

In July, Nursery Coordinator, Suzanne Wilson and volunteer, Su Dawson, did a regular check-in at the nursery.



Landholders Richard and Jennifer with some of their chosen plants (Photo: FIDO)

Five new species were added to the plants being propagated: *Banksia aemula* (wallam banksia – a shrub), *Chrysocephalum apiculatum* (yellow buttons - a ground cover), *Tetragonia tetragonoides* (Warrigal greens - bush food plant), *Clematicissus opaca* (small-leaved water vine – a climber) and - (low shrub/ ground cover). Platysace leaves when crushed have a pleasant scent, and the plant comes from the same family (Apiacea) as carrots or parsley.

Added to these - *Petalostigma pubescens*, *Melastoma malabathricum*, *Banksia robur*, *Ficinia nodosa*, *Banksia integrifolia*, *Austromyrtus dulcis*, *Leptospermum polygalifolium*, *Dianella congesta*, *Hoya australis*, *Tecomanthe hillii*, *Embelia Australiana*, *Lomandra sp.*, *Carpobrotus glaucescens*, *Sannantha similis*, and *Phebalium*

woombye, a total of 20 species were sowed either by seed or cuttings, building the stock back up for further plant giveaways.

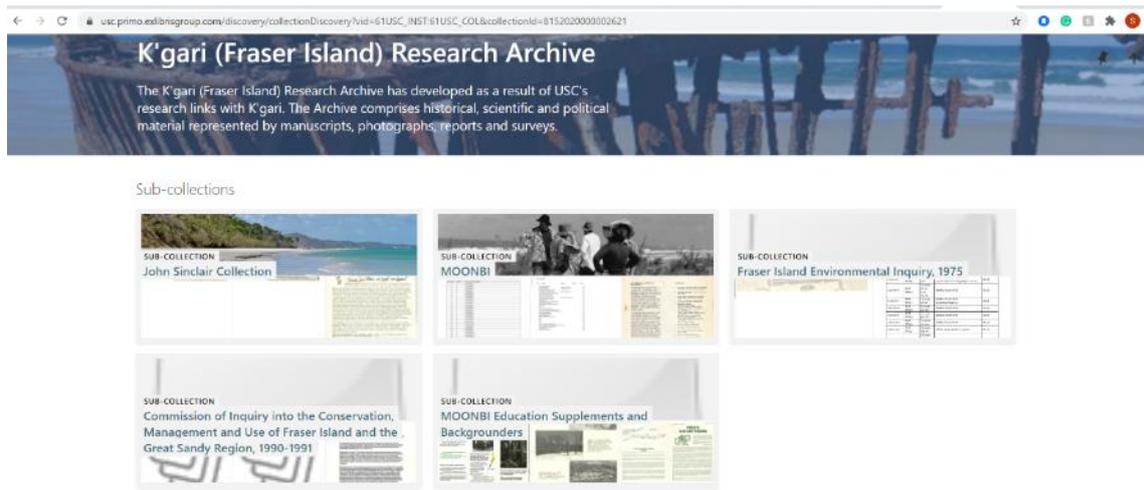
The FIDO team were surprised to find the seed of *Macrozamia douglasii* (Great Sandy Zamia) collected in February 2019 had finally started to sprout. As Suzanne noted - some things take time.

It's busy but rewarding work, with plants provided to two landholders in Eurong's Residential Valley. Plants are provided for free, but a donation to continue FIDO's work is always welcome. If you require plants, please contact the team for more information at fraserislandplants@gmail.com

Article contributed by Fraser Island Defenders Organisation

K'gari Research Archive

The K'gari Research Archive is "housed" at the University of the Sunshine Coast's Sippy Downs Campus. The Archive is the most significant collection of historical documents, data, research reports, oral histories and photographs related to K'gari. Most of the material has now been digitised and accessible to the general public (COVID-19 restrictions apply in terms of physically viewing the documents) <https://libguides.usc.edu.au/fraserisland>.



USC librarian, Beth Cawter, has led the development of the Archive. Beth retired recently, and while wishing her well in her retirement, it is important to acknowledge the significant contribution Beth has made to preserving K'gari's history and research. She will definitely be missed. Courtney Moran has been working alongside Beth and is as enthusiastic as Beth in moving forward on the Archive.

It is anticipated that the materials collection will serve multiple goals, including, very importantly, a central access point to K'gari resources for the broader region and the local community. The long term ambition is to move the Archive's physical assets to the Fraser Coast campus so that it is (appropriately) housed on Country.

If you wish to access the collection or have further questions, please contact Kim Walker at kwalker4@usc.edu.au.

Contributed by Dr Kim Walker, University of the Sunshine Coast

Totally Wild for K'gari

In late October, Network Ten's popular children's show, *Totally Wild*, filmed with the Butchulla Aboriginal Corporation and Butchulla Land and Sea Rangers. The BAC, BLSR and Skilling Queenslanders for Work Trainees recorded a total of four segments over two days featuring the Junior Rangers program (along with Senior Students from the Urangan Point State School) on Butchulla Culture and Cultural Heritage, along with Myrtle Rust and Marine Debris. The segments will go to air in the coming weeks.

Totally Wild has been providing quality stories for young people for over 25 years, taking their audience on wildlife adventures across Australia and around the globe. Every episode brings something new – from unique animal behaviour to extreme and unusual sports, outdoor adventures and the latest environmental stories.



From L to R: BLSR Skilling Queenslanders for Work trainees prepare sand art, BAC Cultural Heritage Officer, Dustyn Currie performs a Butchulla dance, and school leaders from Urangan Point State School learn about recording cultural heritage and marine debris from the BLSR (Photos: BLSR).

Article contributed by the Butchulla Land and Sea Rangers

Feature Pest: Mother-in-Law's Tongue

Native to some parts of tropical western Africa (i.e. Zaire and northern Nigeria), mother-in-law's tongue (*Sansevieria trifasciata*) is regarded as an environmental weed in Queensland, New South Wales and the Northern Territory, and as a "sleeper weed" in other parts of Australia.

The creeping underground stems (i.e. rhizomes) are relatively thick and somewhat fleshy. They are usually bright orange on the outside and whitish on the inside.

The large sword-shaped or elongated leaves are upright (i.e. erect) and usually arranged in small clusters of 2-6 leaves. These leaves (30-175 cm long and 2.5-9 cm wide) are also thick and somewhat fleshy (i.e. succulent) with sharply-pointed tips. They have entire margins, are hairless, and are relatively long-lived. Both leaf surfaces are dark green and variegated/irregularly striped and banded with pale green or whitish-green.



Mother-in-law's Tongue leaves and flower spikes

The upright flowering stems are relatively slender and usually shorter than the leaves (30-75 cm long). They bear numerous flowers in elongated clusters near their tips. The flowers are white, yellowish-white or greenish-white in colour and are usually arranged groups of 1-3 along the flowering stems. Flowering occurs mostly during spring and summer (i.e. from September to February). The small rounded fruit is a berry that turns from green to bright orange as it matures, containing two seeds.

This species reproduces by seed and also vegetatively via its creeping underground rhizomes. The seeds are dispersed by birds and other animals that eat the brightly coloured fruit. The creeping underground can spread some distance and greatly increase the size of colonies. However, the primary means of dispersal of this species to new areas is via the dumping of pieces of the underground stems (i.e. rhizome segments) in garden waste, so care must be taken with its disposal.

For manual removal, carefully dig out isolated plants and small infestations, making sure that all fragments of the substantial rhizome system are removed. This requires persistent effort and very regular monitoring of the site and removal of any new growth and its rhizome. To prevent reshooting, all plant pieces should be put into strong bags and removed from bushland. Alternatively, you can place plant parts in a sealed black plastic bag, and leave in the sun for a week to kill it.

Mother in Law's tongue is a declared pest plant on Fraser Island under the Fraser Coast Regional Council Local Law No. 3 (Community and Environment Management) 2011 and Subordinate Local Law No. 3 (Community and Environment Management) 2011. All landowners on land under their management are legally responsible for controlling pest plants on their property with an obligation to eradicate where possible, prevent the spread of and reduce the existing size of infestations.

Thank You to Our Sponsors!

As many of you would be aware, the Fraser Island Natural Integrity Alliance (FINIA) is a non-incorporated, not-for-profit, umbrella organisation for its partners. As a non-incorporated organisation, we rely on our partners to support our activities for the Fraser Island (K'gari) World Heritage site, with no dedicated funding to support our meetings, administration and barge transfers. Without this generosity, FINIA's activities would be far more challenging, so we would like to acknowledge the following sponsors for their generous support:



Fraser Coast Regional Council – who provide meeting venues.
Groups and organisations - that sponsor catering for meetings.
Kingfisher Bay Resort Group – who support many of our on-ground activities, with subsidised barge fees.

Add to this our amazing contributors, volunteers and donors—K'gari is a special place that attracts truly special people. Thanks to you all for making FINIA work.

Dates for the Diary

What: Weed Spotter Workshop

Where: Reception Room, Maryborough Town Hall

When: 10am to 12pm, 10 November

For: Join us for a FREE 2-hour weed spotter workshop with Dr Melinda Laidlaw Senior Ecologist, [Weed Spotters Network](#) Queensland Coordinator from the Queensland Herbarium. Melinda's presentation will cover weed ecology, legislation, weed surveillance and weed identification.

Cost: **FREE**

More info: For more information or to register your interest, please email contactfinia@gmail.com

What: Fraser Island Natural Integrity Alliance Meetings

Where: Town Hall, Maryborough

When: 12pm to 3pm, 10 November 2020 – **NOTE time change for this meeting**

For: For all FINIA members and supporters. Quarterly meetings are a great chance to catch up and share what's happening or should be happening on Fraser Island (K'gari).

Cost: **FREE** (although we always appreciate a sponsor for morning tea or lunch).

More info: Please contact the Chair, Sue Sargent on 0429 462 041 or email contactfinia@gmail.com.

What: 2020 National Biosecurity Forum

Where: Online

When: 9-12 November

For: An opportunity to discuss biosecurity challenges, achievements and future directions with government and industry representatives. Learn more about the latest in biosecurity innovations, communication and engagement initiatives, and collaborative efforts that are underway to strengthen Australia's biosecurity system.

Cost: **FREE**

More info: For more information or to register, check out the Department's [website](#).

What: Environmental Biosecurity Office Webinar Program

Where: Online – register first!

When: Monthly – until November 2020

For: If you have a spare 60 or (even better) 90 minutes a month, why not join the Environmental Biosecurity Office for one or more of their engaging webinars? The EBO is using the Department's [HaveYourSay](#) engagement platform to run alongside the seminar series so that relevant information can be further shared and discussed online following the webinars.

10 November: Phytophthora 2

24 November: Biosecurity in our backyard

3 December: Myrtle Rust

**Webinar dates are subject to change pending presenter availability.*

Cost: **FREE**

More info: For more information, check out the EBO's [website](#) or register using this [link](#).

What: Bush Regeneration and Monitoring

Where: Happy Valley, Fraser Island

When: 18 November to 21 November (Sunday to Saturday).

For: Peter Shooter leads these trips to help tackle the heavy weed infestation in and around Happy Valley. A group of up to 8 will share "Kurrawa", a comfortable holiday house in the centre of Happy Valley. The group will work to contain a particularly aggressive weed with poisonous seeds, *Abrus prectorius* Var. *Africanus* that is heavily impacting on the vegetation but isn't found anywhere else on Fraser Island. As the *Abrus* is coming under control, the team will be increasingly turning to eliminate large woody weeds Easter Cassia and Lantana. Fitness is needed to carry heavy chemical backpack sprays across steep terrain.

Cost: \$300 (\$200 for concessions) to subsidise costs.

More info: Please send any questions to weeding@fido.org.au.

Funding Opportunities

What: Gambling Community Benefit Fund

For: One-off grants of up to \$35,000 (inc. GST) for not-for-profit organisations to help provide community services or activities that benefit the Queensland community. To increase access to funding, the GCBF five funding rounds a year with the next one being with Round 104.

When: Round 107 is now open and will close at 11.59 pm on 30 November 2020.

Email: cbf@treasury.qld.gov.au

Phone: (07) 3247 4284

Website: <http://www.justice.qld.gov.au/corporate/sponsorships-and-grants/grants/community-benefit-funding-programs>

What: Norman Wettenhall Foundation—Small Environmental Grant Scheme

For: Projects that enhance or maintain the vitality and diversity of the Australian natural living environment. Objectives of the Small Environmental Grants Scheme (up to \$10K) are flora and fauna conservation and threatened mammal conservation with one or more of the following: monitoring/recording data, community education, community capacity building (training) and research/science.

When: Next round opens 1 December 2020 (funding released February 2021)

Phone: (03) 5472 1316 - Elizabeth (Beth) Mellick, Executive Officer

Email: beth@nwf.org.au

Website: <http://www.nwf.org.au/>

What: Australian Geographic Society Sponsorship

For: Founded by Dick Smith, each quarter up to \$15,000 is made available for Australian Geographic Society Project Grants. Funding provided by the Society for Project Sponsorship targets all four Project Categories: Science, Community, Adventure and Environment. The society also offers seed grants between \$500 and \$3000.

When: Applications are now taken throughout the year for sponsorship rounds.

Phone: (02) 9263 9825

Email: society@ausgeo.com.au

Website: <http://www.australiangeographic.com.au/society/sponsorship/2013/11/apply-for-sponsorship>

What: The Mullum Trust

For: Supports projects which have significant, ongoing or catalytic environmental outcomes. Grants are available from \$100 to \$10,000. Projects with specific localised environmental outcomes are preferred, although projects which are locally based but have far-reaching impacts are also encouraged.

When: Ongoing

Phone: Mr Ryan Neoh on (03) 9671 6658

Email: rneoh@deloitte.com.au

Website: <http://thetrusteeforthemullumtrust.myob.net/>