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Mossman Botanic Garden Newsletter

The purpose of the Mossman Botanic Garden is to demonstrate the crucial role that rainforests play in humanity's survival on Earth.

March and April have been very active months with many different organisations reaching out to us at the Mossman Botanic Garden (MBG) asking how they can align with us on this important project.

As we now move forward to a design and construct application with council, we are starting to plan for the greenhouse that will be in stage 1A of the gardens, in addition to rehabilitation of areas adjoining remnant rainforest on the site.

MBG partners on award winning plant conservation project

The MBG is a core partner on a project focused on saving the plants of the mountaintops of the Wet Tropics World Heritage area. The 'Tropical Mountain Plant Science' (TroMPS) project aims to secure a future for plants that are threatened by climate change, which is projected to drastically alter the temperature and moisture conditions throughout the tropics but particularly in high altitude landscapes.

The Wet Tropics mountains are exceedingly rich in plant biodiversity harbouring hundreds of species, over 70 of which are found nowhere else on Earth. We aim to secure populations of these species (ex situ collections) across several well-managed botanic gardens, such as MBG, with the design and management of these ex- situ collections backed by cutting edge science. Research is being undertaken into understanding how much genetic diversity exists in the wild populations, how the plants might respond to warmer temperatures and changed rainfall patterns, and how best to 'bank' the seeds of these threatened species.

The project is led by the Australian Tropical Herbarium at James Cook University in Cairns and involves partnerships with seven botanical gardens (including MBG), three herbaria, three plant genetics research labs, two seed banks, a plant physiology research lab, a natural products biochemistry lab, two Indigenous organisations (Western Yalanji Registered Native Title Body Corporate, and Jabalbina Yalanji Aboriginal Registered Native Title Body Corporate), two statutory land management

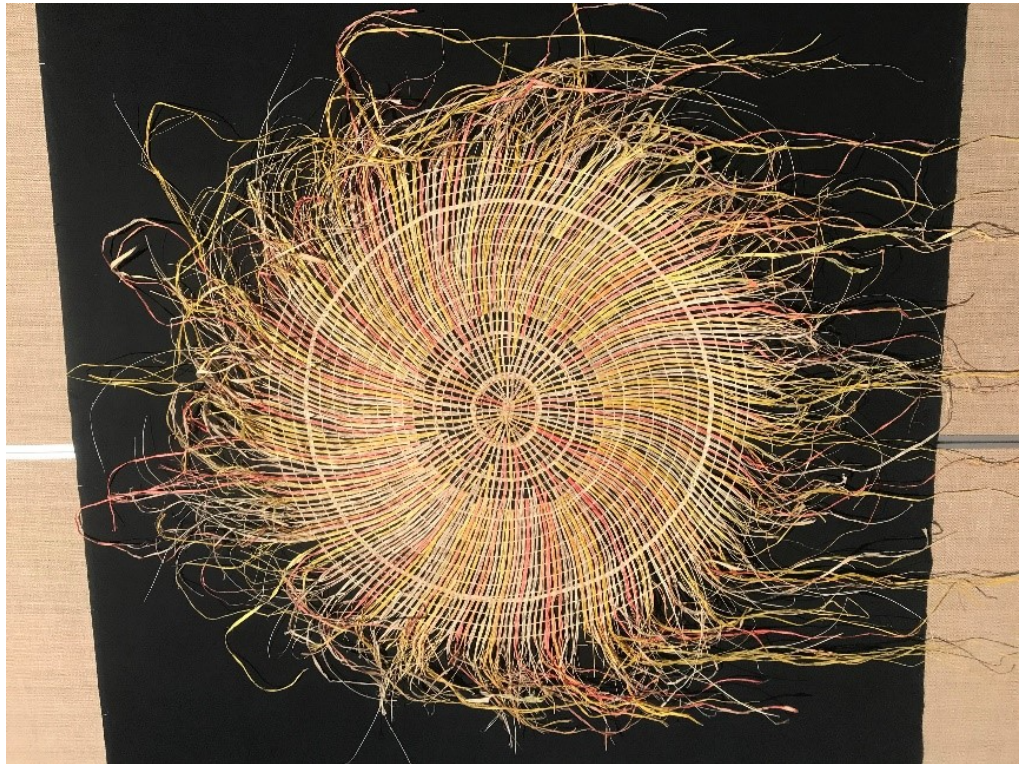
authorities (Queensland Parks and Wildlife Service, and Wet Tropics Management Authority). In addition to these science and land management partnerships, the project boasts an artist-in-residence – Donna Davis – who has produced many contemporary art works and exhibitions based on the project (see <https://donnadavisartist.weebly.com/mountain-flora-project.html>).

There have been many notable outcomes from the project so far, including establish ex situ collections of 38 species, discovering at least five new species of plants, and even re-discovering a fern thought to be extinct. Perhaps the most satisfying outcome has been winning the 2021 Cassowary Award for Climate Change Leadership from the Wet Tropics Management Authority – see <https://www.youtube.com/watch?v=ReF9LR0SPaY>, and <https://www.tropiconow.com.au/2021/june/21/local-leaders-awarded-for-wet-tropics-conservation-projects>.

More information on the project can be found at www.tromps.org.au

Ethnobotany and the MBG

Ethnobotany is the study of the cultural use and relationship between plants and people. For thousands of years, Indigenous Australians have used plants for food, medicine, fibre, weapons, musical instruments, and ceremonies. This knowledge has been passed down orally through generations. While a lot of traditional plant use knowledge has been lost, Indigenous peoples are still accessing and using traditional plant knowledge today. This is especially true of the Eastern Kuku Yalanji people on whose country the MBG is situated. The MBG aspires to work with Eastern Kuku Yalanji knowledge holders to showcase Eastern Kuku Yalanji ethnobotanical knowledge respectfully and appropriately throughout the gardens as they develop. In fact the first garden we have established was inspired by Delissa Walker, a Kuku Yalanji Master Weaver and developed by MBG Board member John Sullivan and celebrates the black palm (*Normanbya normanbyi*), a culturally significant species found only on Kuku Yalanji country in the Daintree area.



Future work, undertaken with Eastern Kuku Yalanji knowledge holders and the Australian Tropical Herbarium, will document Eastern Kuku Yalanji ethnobotany and explore how the MBG can build extraordinary gardens that help raise awareness of Indigenous biocultural knowledge in the broader community.

Green Food Australia and the Mossman Botanic Garden

Green Food Australia is forging a path in Tropical North Queensland when it comes to soil regeneration through natural processes that utilise urban waste. Converting food waste into a soil probiotic & bio-fertiliser, XLR8®Bio from restaurant food waste is just one piece of the plan for Green Food Australia; working with land holders to convert waste existing on their property into a humus rich topsoil ameliorant called HumiSoil®, is the other. The combined reactions of the two products significantly enhance the regeneration of soil biology, soil structure and manufacture of water. ie. the “Green Food way” captures those gasses, carbon and water and puts it back into the soil where it belongs.

Green Food Australia is led by tourism & hospitality duo Jess & Dominik Uhlig and was originally launched in a bid to fight food waste in the urban space. A quick whirl down the rabbit hole of biotech and soil science found them on the path they’re on today. Tackling the impacts of climate change through prevention and remediation, one carrot top at a time.

The buck doesn't stop at the door of the agricultural scene either – soil is soil and where there's people working with soil, Green Food Australia will be there every step of the way. From landscapers, to Councils, nurseries to golf courses, Green Food Australia has a solution to rebuilding the soil and growing our kids' futures for a cleaner and more stable environment. "The opportunity to work with the creators of the Mossman Botanic Gardens and the traditional landholders in regenerating the site into a rich, bio-diverse landscape for generations to come is an absolute honour. We can't wait to get our hands dirty!"

New Fundraising platform commencing soon for MBG.

"The greatest threat to our planet is the belief that someone else will save it"

**Robert Swan OBE
Quote**

The MBG is now moving into the final stages of organisational readiness with a new dedicated fund-raising platform. The company that has developed this innovative platform, recognise the need to match philanthropists and major organisations looking to support critical biodiversity projects that are not yet offering offsets or sequestration opportunities but are 100% focussed on slowing down the catastrophic loss of plants and animals in biodiversity hotspots. Designed to enable corporates with the opportunity to sponsor/donate to the garden. As a research botanic garden based at the epicentre of biodiversity in Australia surrounded by the Daintree national Park and flanked by two world heritage sites there are few sites that can match this location

The contributions made by sponsors will also enable their employees, executives, and customers from all around the world to visit and feel a sense of pride in the unique Mossman Botanic Garden site and get a better understanding of the critical importance of caring for the Wet Tropics and the rare and endangered plants within this extraordinary biodiversity location.

The MBG Membership Scheme is designed to create opportunities for members, at all levels, to support the economic future of the Mossman Botanic Garden. Annual membership fees and/or one-off contributions (in-kind or financial), ensure the long-term sustainability and viability of the MBG. Some organisations and family trusts make donations directly to the gardens. We urge people seeking to become members to go to the membership page on the website, every membership counts as we move forward.

This will be matched with the funding platform that is designed to connect donors to the MBG's biodiversity rich project while broadening the Mossman Botanic Gardens networking opportunities. Providing donors with the opportunity to sponsor square metres of the gardens at \$25.00 per square, per year, it is aimed at corporates and individuals who want to use their squares to both leverage their donations and demonstrate their support of this critical Wet Tropics biodiversity conservation. Project. The donor receives back from the funding platform storytelling, digital

reporting on the progress in the garden and mapping systems demonstrating meaningful evidence and insights back to the garden.

All donations to the Mossman Botanic Garden over \$2 are eligible for DGR status.

100% of all funds raised through the “sponsor a square” platform will be go towards both the capital expenditure and operational needs of the MBG and will enable the executive team to concentrate on seeking out further opportunities including grants, matched funding from other organisations, and ongoing input from all three tiers of government.

A big thank you to everyone for your patience as we move forward, we are currently a small team working as hard as we can to really get the rubber hitting the road and our core aim is to deliver a project that the entire community will be proud of as it integrates core biodiversity values into education, training, tourism opportunities and sustainable community development for the region.

We are looking to hold our next AGM on the **20th of June 2023** with the location to be confirmed closer to the date.