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Noosa Biosphere Reserve Foundation

ANNUAL REPORT 2020/21

World Class. It's in our nature.

ACKNOWLEDGEMENTS

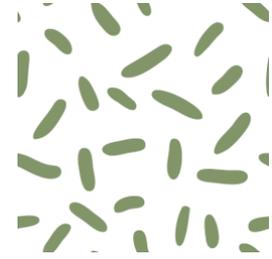
The Noosa Biosphere Reserve Foundation acknowledges the Kabi Kabi/Gubbi Gubbi people, the Traditional Custodians of the land and waters on which we meet. We pay our respects to Elders past, present and emerging and recognise the strength, resilience and ongoing connection to country of all Aboriginal and Torres Strait Islander people.

The Noosa Biosphere Reserve Foundation acknowledges and thanks the many partners and stakeholders it works with to progress the aims of the UNESCO Man and Biosphere Programme within the Noosa Shire, the Noosa Biosphere Reserve.



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Report from the Chair

While the primary focus of this Annual Report is on the fiscal year ending 30 June 2021, the majority of our projects and activity are multi-year and thus not limited to a single financial year. This report covers relevant elements to provide both context and continuity.

As the following pages provide a more detailed view of the Noosa Biosphere Reserve Foundation's (NBRF) financials, projects and progress, my Report from the Chair touches on some of the highlights and trends.

SYMPOSIUMS

In FY2020/21, our Symposium model continues to bear fruit with the Glossy Black-Cockatoo and Marine Species Protection forums. The role of the Foundation is to facilitate and enable engagement across stakeholders, bringing together leading researchers, local and state government representatives, relevant community representatives, as well as passionate individuals with local expertise. This meeting breaks down silos, stimulates collaboration and is intended to initiate new projects and on-ground efforts focused on the problems, priorities and gaps identified by participants.

As an initial outcome, the Glossy Black-Cockatoo Forum led directly to the Glossy Black-Cockatoo Bioacoustics Monitoring project using innovative sound recording software to help identify local nesting sites which can then be incorporated into a new species management plan. We anticipate further projects will develop from these new relationships in coming years.

Similarly, the Marine Species Protection Symposium supported Noosa's potential participation in a State Government Scientific Panel led trial of new shark control technologies, as well as an invitation to support and participate in additional vital research that will inform best practices supporting both human safety and marine species protection outcomes.

PROJECTS AND INITIATIVES

The fiscal year FY21 brought to completion or received final reports on a number of projects including the UNESCO Award-winning *Keep on Keeping it in Kin Kin* project delivered by Noosa & District Land Care; the *Koala Forever Noosa* and *Noosa Oyster Reef Restoration Trial* in partnership with University of Sunshine Coast (USC); the *Noosa River Biodiversity* project with University of Queensland; and the Griffith University supported *Noosa Native Oyster Diversity* project.

In addition, new initiatives included the in-kind support commitment for a ground-breaking koala Chlamydial vaccine trial with Professor Peter Timms at USC and a Central Queensland University project measuring the impact of tree planting and education on the incidence of eco-anxiety in youth.

This year the Foundation also launched several working groups outside of the main Board activities to focus on key areas for organisational enhancement including external funding, community engagement, internal governance, a Noosa Biosphere Report Card, and a management model review. Groups report to the Board of Directors monthly.

PARTNERSHIPS

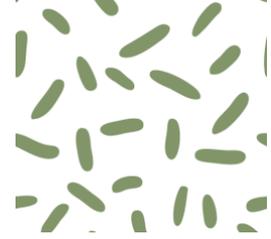
The Board has been working to deepen its partnership and future project pipeline by strengthening its relationships. Significantly, we signed a Memorandum of Understanding with USC and established a joint working group which will pave the way for new research and education opportunities, as well as potential public education events, in the Noosa Biosphere Reserve.

As part of this collaboration, NBRF and USC are working together on two new PhD scholarships that will formally launch in the coming year focused on the Noosa Biosphere Reserve as well as a project to develop and deliver a new biennial Noosa Biosphere Report Card to monitor key indicators.

We were also very pleased to receive a vote of confidence from Noosa Council with the unanimous approval and signing of a new four-year Partnership Agreement, effective 1 July 2021.

This past year also saw the launch of the Australian Man and Biosphere National Committee which includes representatives from all Australian biosphere reserves and the Australian Government Department of Agriculture, Water and the Environment, with the intent of creating opportunities to pool our knowledge and resources and initiate programs and support from a national level for the benefit of our local biosphere reserve communities.

Further in this report you will hear more about the Foundation's increasing connection with the international community of now 720 biosphere reserves. We are excited by the potential for collaboration, and UNESCO's recognition of the value in the work being done within the Noosa Biosphere.



COMMUNITY ENGAGEMENT

While much more is planned, this year the NBRF participated in a number of public events attended by our directors and team who are engaging more actively with community members.

Our Executive Coordinator and individual Board Directors attended a broad cross-section of community and stakeholder group meetings to increase our public engagement and provide two-way communication and collaboration with projects across our focus pillars of Land, Water, Wildlife and People & Economy.

The Black & Glossy Gala in November 2020 was well received and greatly contributed to a deeper community understanding of the value of the Noosa Biosphere Reserve designation and the role the NBRF plays in support. Contributions raised on the day were allocated to the Glossy Black-Cockatoo Bioacoustics Monitoring project and we look forward to the Wild Koala Gala in November 2021 and the launch of the Noosa Biosphere Awards as part of celebrating the 50th Anniversary of the UNESCO Man and Biosphere Programme.

With the support and unflagging efforts of our Communications Coordinator we greatly increased our social and traditional media communications. We have continued to enhance the robustness of the noosabiosphere.org.au website including comprehensive information regarding our projects, governance and policy, as part of our commitment to integrity and transparency.

ACKNOWLEDGEMENTS

In closing, I thank Noosa Council for their continued support of the Noosa Biosphere designation and the Noosa Biosphere Reserve Foundation in its continued efforts to deliver on the spirit and intent of the UNESCO MaB Programme.

I also thank my fellow Board members who have volunteered their time, energy and skills and stepped up their level of commitment and time investment this past year as we increased our scope. In addition, I owe a great debt of gratitude for the countless hours and unflagging efforts of our Executive Coordinator, Sharon Wright and our Communications Coordinator, Alison Cooper.

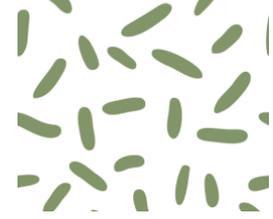
Special recognition is also deserved for the two Directors stepping down along with myself at the end of our terms in late 2021. Greg Schumann has served as both Deputy Chair and Secretary supporting myself while Dr David Dique volunteered his services as Director for six years.

Finally, a sincere thank you to our university, community group and stakeholder partners without whom these projects would not have been successful – as well as the many individual community members who have taken the time to provide input and expressions of support.

For the Biosphere,



Rex Halverson
Chair, Noosa Biosphere Reserve Foundation



The Board

The Board consists of eight Directors each tasked with leading at least one priority area or project. They are: Rex Halverson, Chair; Greg Schumann, Deputy Chair and Company Secretary; Cr Tom Wegener, Noosa Council Representative; Prof Rod Smith; Jady Smith; Dr David Dique, Duncan Thompson and Rowan Rafferty. The Board represents a broad cross-section of professional, corporate and academic experience and meets once per month.

Executive Coordinator

Sharon Wright was appointed as the Executive Coordinator in August 2020. Since commencing Sharon has played a critical role in managing the Foundation’s administration, program development and management, building key relationships and coordinating community engagement activities, including fundraising activities. Sharon instigated the Noosa Biosphere Black & Glossy Gala fundraising event in the first month of her appointment which has proved to be an excellent public awareness raising activity attracting strong media attention and community support.

Committees

In 2020/21 the Board established a committee structure to more effectively deal with complex or specialised issues, and to use Directors’ time more efficiently. Each committee (working group) is chaired by a Board Director who delivers a monthly report on its progress to the full Board.

GOVERNANCE COMMITTEE

The Governance Committee was formed to review the Constitution and Trust to ensure our operational model is in line with the Strategic Plan. It was to consider the organisational structure of the NBRF and review governance policies in accordance with the aims of the Trust. The Governance Committee also developed recommendations for the recruitment of new directors.

COMMUNITY ENGAGEMENT COMMITTEE

The Community Engagement Committee was established in response to the Board’s concerted effort to improve its engagement and raise the profile and function of the NBRF and its Board in the community. Actions have included:

- Engagement at the Tourism Noosa Hinterland Roadshow in August 2020 as part of the launch of the Noosa Hinterland Trail Network.
- Short video series about local action in the Noosa Biosphere for Tourism Noosa’s Enter the Biosphere campaign.

- Noosa Environmental Education Hub Youth Advocacy Council engagement and media relations support
- Engagement with Plastic Free Noosa on Noosa Water bottle campaign wraps
- Presentations to Noosa Council
- Stakeholder symposiums
- Noosa Biosphere Gala
- Noosa Biosphere Awards

FUNDRAISING COMMITTEE

Fundraising Committee is tasked with identifying alternative funding streams to continue the UNESCO Man and Biosphere Programme mandate to protect biodiversity and promote sustainable development. A broader mix of philanthropic support, corporate sponsorships, crowd-funding campaigns, state and federal grant funding and donor cultivation have been pursued to meet these aims.

REPORT CARD

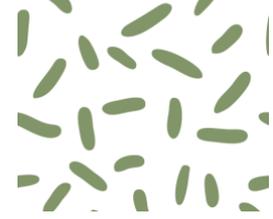
An ambitious project, the Committee is in the process of finalising the scope of work and project plan. The aim of the Noosa Biosphere Reserve Biennial Report Card is to:

- Provide a regular biennial report on the status of the Noosa Biosphere Reserve.
- Establish relevant base-line indicators.
- Be accessible to the NBRF, Noosa Shire Council and the Noosa community.
- Compliment UNESCO periodic reviews.

Advisors

In 2021, the Board adopted policy and procedures for the appointment of Board Advisors. Their function is to advise and make non-binding recommendations to the NBRF Board with respect to matters within their areas of experience and expertise. The role is voluntary and purely advisory, the ultimate responsibility for the management of NBRF’s business and affairs remains with the Board. The Board was delighted to appoint Carly Vidal-Wallace as its first official Advisor. Carly has made valuable contribution to NBRF particularly with the Noosa Biosphere Gala.

The specialist expertise and pro bono support of Lesleigh Mayes of LA Mayes Law is gratefully acknowledged.



Financial report

The Auditors report and the statutory accounts are included in detail at Appendix B. The Noosa Biosphere Reserve Foundation is required to report against relevant accounting standards. This complicates the presentation as project funds can only be counted as income as they are earned (promised) and not when physically received as cash. The balance of the grant promised is held on the balance sheet as an asset with an offsetting liability. Also, the fiscal accounts consolidate the financials into one P&L. The management accounts measure financials by project and use cash-based accounting.

Statement of financial position

As of 30 June 2021, our financial position shows total equity of \$173,344 with an operating result of -\$21,005 as represented by the net income and expenditure set out in the following sections.

NBRF has no significant capital assets. Our total assets are \$280,055 of which \$251,177 are the Foundation's bank deposits which reflects project funds not yet paid out or allocated.

Total liabilities are \$106,711 and liabilities for planned projects are \$106,653. The difference between assets and liabilities is a surplus of \$173,344 carried forward to 2021/22 for the increased activity envisaged.

Income

NBRF had a total income of \$206,087 for the financial year, made up of:

- \$82,034 – Environmental Grant (NSC)
- \$100,000 – Operational Grant (NSC)
- \$6 – Interest
- \$21,361 – Activities income (Gala)
- \$2,001 – Sponsorship (Gala)
- \$685 – Donations

Expenditure

Expenses totaled \$227,092, made up of direct project related costs (\$87,125) and operational related costs (\$139,967)

The increase in total expenditure of \$9,596 from the previous financial year is due to an increase in contracted support staff expenses as part of the budget plan for FY 20-21 as previously submitted.

GRANTS PROVIDED

The following grants were provided between 01/07/2020 to 30/06/2021:

PROJECT	AMOUNT	RECIPIENTS
Keep on Keeping it in Kin Kin	\$18,700	Noosa & District Landcare Group
Tackling Eco-Anxiety	\$10,000	Central Queensland University
Bring Back the Fish (BBTF)	\$28,659	The University of Queensland
Total Grants	\$57,359	
Bring Back the Fish - project consultancy	\$24,075	Ecological Services Professionals
Bring Back the Koala - video	\$600	Big Film Company
Glossy Black-Cockatoo Bioacoustics survey	\$5,091	Bushland Conservation Management
Total Additional Project Expenses	\$29,766	

OPERATIONAL EXPENSES

Operational expenses for the year of \$139,967 were proportioned as set out in Figure 1.

The contract support staff are attributed to contractors supporting the Board by undertaking NBRF administration and external marketing communications.

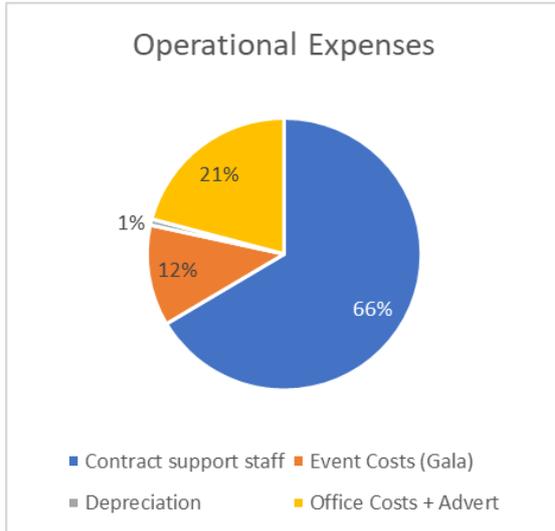


Figure 1: Operational Expenses

Value creation

The Noosa Biosphere Reserve Foundation is managed by a volunteer Board of Directors. The Foundation receives operational funding from Noosa Council as well as other partners and donors to undertake research and projects that assist the preservation of the UNESCO Noosa Biosphere Reserve.

The volunteer Board, and funds received, typically have a multiplier effect (the value of work performed or total project value in comparison to total funding received) that adds significant value to the Noosa Biosphere (Figure 2).

For cash and in-kind contributions from third parties, the NBRF has utilised the multiplier that has been achieved on each specific project coupled with the allocation of funds for that specific project in the fiscal year.

For the Board, a conservative number has been estimated with the Chairperson spending on average 2 days a week and the remaining Board members spending approximately a half day per week on Foundation-related activities. Given the experience and seniority of the Board, we have assumed a consulting rate of \$200 per hour for this comparison.

What this aims to demonstrate, is that Noosa Council funding amounts to less than 30 percent of the value creation through Foundation projects and activities, for the Noosa Biosphere. As such, it represents significant value for the Noosa Council in continuing support that achieves tangible outcomes in across environmental, social, cultural and economic areas of the Noosa Shire.

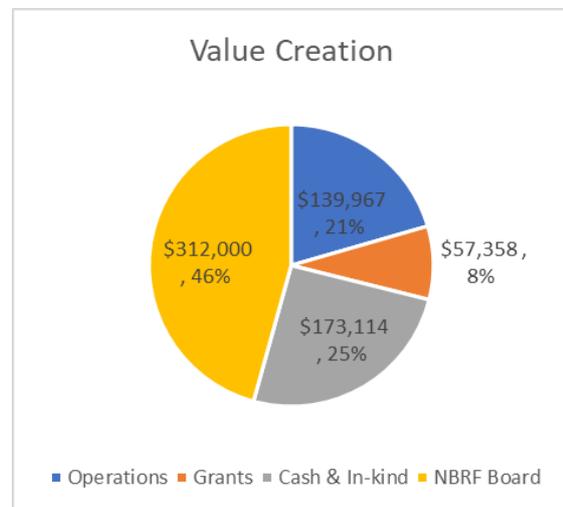
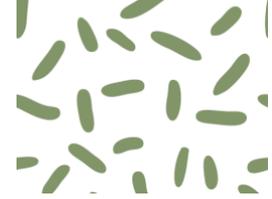


Figure 2: Value Creation



Partnerships and engagement

Noosa Shire Council

It was with great pleasure that the NBRF signed a new four-year partnership agreement with the Noosa Shire Council, effective 1 July 2021.

This partnership agreement provides confidence to move forward with our medium to long-term projects and goals with assurance we can deliver high value outcomes for the Noosa Shire.

It also highlights a pivotal shift in a positive new direction for NBRF. We are committed to ensuring the Noosa Biosphere remains a 'celebration of community and environment' and will continue to work closely with the Noosa community, our partners and supporters to build on these relationships.

We thank the Noosa Councillors and staff for their ongoing encouragement and support.

University of the Sunshine Coast

The University of the Sunshine Coast (USC) and NBRF signed a Memorandum of Understanding (MOU) where USC and NBRF agree to support and coordinate research and education that enhances biodiversity conservation and promotes sustainable living in Noosa. This will be achieved through:

- Development of collaborative partnerships between the NBRF and USC academics or research clusters.
- Development and delivery of specific research projects or initiatives.
- Delivery of joint education events, e.g. symposiums or conferences.
- Delivery of education initiatives, e.g. undergraduate work integrated learning (WIL) opportunities or postgraduate (Masters/PhD) scholarships.

A Management Committee and working groups were quickly established and work has commenced on developing WIL opportunities; a biennial report (Report Card) that will report on the state of the Noosa Biosphere Reserve in line with UNESCO MAB Programme objectives; and postgraduate (Masters/PhD) scholarships.

PHD SCHOLARSHIPS

As an adjunct to the MOU, a program was initiated that supports two PhD candidates undertaking projects within the Noosa Biosphere Reserve that aim to advance the objectives of the UNESCO MaB Programme. The University has allocated two of its PhD Research Training Program scholarships on an on-going basis and NBRF has agreed to provide a top-up of \$10,000

per year for three years for each candidate, for a total contribution of \$60,000. These projects are due to begin in Semester 1 of 2022.

KOALA VACCINE TRIAL

USC is leading a Phase 3 rollout of a koala chlamydia vaccine that has been developed over several years with a number of significant partners including the Australia Zoo Wildlife Hospital. The vaccine will be trialed in about 400 koalas from October 2021.

The NBRF is a supporter of the project providing in-kind support in the successful Queensland Government grant application, securing \$100,000 towards the trial. NBRF will continue to support USC in its community engagement effort.



Noosa Biosphere Reserve Foundation signs new agreement with Noosa Council, 2021.

Australian National MAB Committee

There are currently four UNESCO recognised Man and Biosphere Reserves in Australia (with over 720 worldwide). This year the Foundation helped launch the Australian Man and Biosphere National Committee with representatives from all Australian biosphere reserves as well as the Australian Government Department of Agriculture, Water and the Environment. While still in the early stages of operation the goal is to increase communication and collaboration at a national and international level.

UNESCO Michel Batisse Award

The NBRF was awarded the coveted UNESCO Michel Batisse Award for Biosphere Reserve Management in August 2021. Executive Officer, Sharon Wright, prepared the successful submission based on the *Keeping it in Kin Kin* project with the assistance of Phil Moran, General Manager of the project proponent, Noosa and District Landcare (NDLG). Sharon presented the case study via Zoom at the 33rd Session of the UNESCO Man and the Biosphere Conference held in Abuja, Nigeria where she received the Award on behalf of the NBRF and NDLG.

Noosa Biosphere Gala

The Noosa Biosphere Annual Gala is a fundraising luncheon held on the first Tuesday of November, to raise awareness and support for biodiversity conservation and research in the Noosa Biosphere Reserve. Launched in 2020, each year the Gala will focus on an important issue close to the heart of Noosa's community as identified through our Symposiums.

In 2020, the Gala focused on the plight of the Glossy Black-Cockatoo. In 2021 Noosa Biosphere Wild Koala Gala will shine a light on koala conservation and will launch the Noosa Biosphere Wild Koala Fund with the aim of raising seed-funding to support new koala conservation and research initiatives in the Noosa Biosphere Reserve.

Noosa Biosphere Awards

The Noosa Biosphere Awards is a new initiative of the Noosa Biosphere Reserve Foundation, launched as part of the 50th Anniversary of the UNESCO Man and the Biosphere Programme celebrations. Planning for the Awards program commenced in early 2021 with the purpose to recognise sustainability and environmental excellence across business and individuals in the Noosa Biosphere Reserve. Entries open in August 2021 with an independent panel of eight judges assessing entries across four categories of Land, Water, Wildlife, and People & Economy – in line with the Foundation's four pillars. Winners will be announced at the Noosa Biosphere Gala.



NBRF Executive Coordinator, Sharon Wright with UNESCO Michel Batisse Award recognition.



Symposiums

The NBRF continued with its Symposium model in 2020/21. The model involves NBRF as facilitator inviting together leading researchers, local and/or state government representatives, relevant community groups and stakeholders, as well as passionate individuals with local knowledge, to break down unintended silos, stimulate collaboration and initiate new projects and on-ground efforts focused on the problems, priorities and gaps identified by participants.

Glossy Black-Cockatoo Forum

The Noosa Biosphere Reserve is considered a significant habitat for this shy and quiet bird with records of up to one third of the entire known population. The Glossy Black-Cockatoo is already vulnerable and with increasing habitat destruction and no species management plan it is more important than ever to seek actions to enhance their resilience.

The Glossy Black-Cockatoo Forum, held in November 2020, sought to share current knowledge and activities on Glossies, identify gaps and opportunities for future management. The priority is to coordinate better understanding and protection of their habitat and ensure the future survival of this iconic species. Participants included leading experts in Glossy Black-Cockatoo research from the University of Queensland and University of the Sunshine Coast; local community conservation groups; local council representatives and the Glossy Black Conservancy.

An initial outcome of the Symposium led directly to the Glossy Black-Cockatoo Bioacoustics Monitoring project, funded by proceeds from the Black & Glossy Gala. It is anticipated further programs and projects will develop from these new relationships in the coming years.

Further, a Glossy Black-Cockatoo Resilience Action Plan is being developed to ensure the future survival of this iconic species. The Interim Report is available on our website.

Marine Species Protection

The aim of the Noosa Marine Species Protection Symposium held in May 2021, was to develop a preferred trial of shark control measures in the Noosa Biosphere Reserve to submit to the Queensland Government. A further outcome of the Marine Symposium was also to identify potential research projects to ensure the protection of marine species in the waters of the Noosa Biosphere Reserve.

Public safety and marine species protection were the top key considerations. Education was identified as the top-ranked shark mitigation

method demonstrating a genuine commitment from the Noosa community to learn how to live in harmony with our marine species. This is in keeping with the Noosa Biosphere Reserve aims of balancing people and nature.

A report of the Symposium findings has been shared with Queensland Government's Department of Agriculture and Fisheries and discussion continue regarding Noosa's potential participation in a State Government Scientific Panel led trial of new shark control technologies, as well as an invitation to support and participate in additional vital research that will inform best practices supporting both human safety and marine biodiversity outcomes.

As a result of the Symposium, NBRF is in discussion with the Queensland Government and USC for future research projects.



*Marine Species
Protection
Symposium*



Projects

The NBRF has continued to partner with universities and stakeholders to develop and deliver projects focusing on new research and innovative solutions that inform best practice management and enhance environmental, social and economic capital in the Noosa Biosphere Reserve.

Projects adhere to the aims of the UNESCO Man and Biosphere Programme and align with our four priority areas of Land, Water, Wildlife, and People & Economy.

Since its inception, the NBRF has sponsored 18 conservation and socio-economic projects valued at more than \$3.4 million. This is a 3.6:1 return on an investment of around \$1 million from the Noosa Council Environment Levy Fund.

New projects

GLOSSY BLACK-COCKATOO BIOACOUSTICS MONITORING

This project will utilise bioacoustics sound recorders with software to monitor and analyse calls of the Glossy Black-Cockatoo. Identifying successful nesting sites will enable better support and conservation management for local Glossy populations. This research can inform feed tree revegetation, watering hole rehabilitation, habitat protection and further nesting box installation in identified Glossy Black Cockatoo critical zones.

TACKLING ECO-ANXIETY

This project proposes to conduct a controlled intervention, based on the Theory of Planned Behaviour (TPB), which follows behavioural theories proved to be most effective at changing patterns of behaviour. The purpose of the study will be to evaluate the effectiveness of an intervention program in changing attitudes, such as anxiety and helplessness, and increasing pro-social and positive behaviours related to climate change. The proposed intervention program will be a tree planting program preceded by a workshop focusing on environmental perspectives and eco-action.

Completed projects

In 2020/21 the NBRF saw the completion and final reports on the following projects:

KEEP ON KEEPING IT IN KIN KIN

Phase 2 of the Keeping it in Kin Kin (KIKK) Noosa catchment priority erosion remediation program by Noosa & District Landcare Group.

NOOSA OYSTER REEF RESTORATION TRIAL

A pilot study to re-establish a lost habitat in the Noosa River by University of the Sunshine Coast with Noosa Parks Association and The Thomas Foundation.

BIODIVERSITY IN THE NOOSA RIVER

An assessment of prawn and estuarine biodiversity recovery by The University of Queensland with Noosa Parks Association and The Thomas Foundation.

NOOSA'S NATIVE OYSTER DIVERSITY

Assessing natural oyster resources in the Noosa River to restore a functional estuary, by Griffith University.

KOALA FOREVER NOOSA

Securing the future of wild koalas in the Noosa Biosphere Reserve by University of the Sunshine Coast.

NOOSA ENVIRONMENTAL EDUCATION HUB

A world-class environmental education hub delivering curriculum extension opportunities related to the Noosa Biosphere Reserve.

Refer to Appendix A for project profiles.



Media and communications

The Noosa Biosphere Reserve Foundation continues to work to maintain regular communication and engagement with the Noosa community. Our focus in the year 2020/21 has been to continue building on the relationships, partnerships and connections built over previous years and after the success of the first Noosa Biosphere Gala.

Marketing

We have increased our effort to maintain an active social media presence and launched the monthly Your Noosa Biosphere News digital newsletter providing updates on projects, community engagements, and other related news and grants.

As part of this relationship building strategy, we refreshed our public-facing brand style. The aim was to update the identity of the Foundation to be more inclusive and community focused, while maintaining the existing Noosa Biosphere® registered trademarked logo under licence. The brand style highlights the Foundation's four pillars with iconography and a unique colour palette for each pillar. As part of this refresh, we updated our marketing signage for events and a marketing brochure to support public education of the Noosa Biosphere Reserve and the Foundation's activities. Public response has been positive with the eye-catching signage attracting interest at community events and new subscriptions to our digital mailing list.

Media communications

Media communications continue as a key part of our communication strategy and we have engaged in a number of proactive and reactive media stories related to project milestones, initiatives and key partnerships.

Key media activity during 2020-2021 has featured:

- Noosa River Biodiversity Report
- Tourism Noosa Enter the Biosphere Campaign
- Noosa Biosphere Black & Glossy Gala
- New Executive Coordinator appointment
- Noosa Youth Advocacy Group
- In-depth Q&A with Noosa Today
- Koala Forever Report
- Marine Species Symposium
- USC Koala Vaccination Trial
- Glossy Black-Cockatoo Bioacoustics Monitoring
- New Partnership with Noosa Council

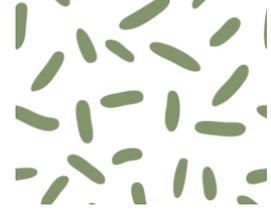
- MOU with University of the Sunshine Coast
- Chair OpEd on NBRF role

Social media

The Noosa Biosphere Reserve Foundation social channels are now across Facebook, Instagram and Linked In. Our social media presence aims to education, inspire and engage the Noosa community in their connection to living in a UNESCO biosphere reserve and our activities under the UNESCO MaB Programme. The NBRF Facebook page continues to grow with recorded year-on-year growth of 45% increase in followers, 401% organic reach, and 220% engaged users.



Media Call: Koala Forever Noosa, Dr Celine Frere



Looking ahead

Board of Directors

The NBRF is committed to diversity and gender equity on the Board. In 2020, the Board made a commitment to achieving gender equity by 2025.

Three Directors of the Board will retire at the end 2021:

- Rex Halverson, as Chair.
- Greg Schumann, as Deputy Chair and Company Secretary.
- David Dique.

As part of the recruitment effort, candidates with experience in corporate finance, legal, governance or fundraising with links to philanthropic organisations or individuals are being sought and will be confirmed at the Annual General Meeting in November 2021.

Symposiums

The ongoing success of NBRF symposiums has confirmed these events as an extremely effective method of identifying current and emerging issues, leveraging funding and resources and ultimately creating real collaborative change. The board proposes to continue the symposiums initiative. There is substantial opportunity to grow these events over time to become international conferences, raising the profile of Noosa as a world-leader in sustainable development and biodiversity conservation.

CIRCULAR ECONOMY

This symposium tentatively planned for May 2022 will examine the best ways the NBRF can contribute to the Circular Economy and form a practical understanding of what this may look like in the Noosa Biosphere Reserve.

The broader aspects of this project will embrace Noosa Shire Waste Management, the compostable processing aspect of those processes, in particular how they relate to landfill minimisation through reuse, repurposing and recycling and non-chemical fertiliser soil improvement for landholders and residents in the Noosa Shire.

The latter will inform a part of an Agri-Hub project, which is envisaged to make further positive contribution to the Noosa Biosphere's circular economy. It is envisaged that the project will involve widespread community consultation and be the subject of an NBRF Symposium in 2022.

Projects

The Board actively seeks to work with community on solutions to enhance the Noosa Biosphere Reserve. NBRF is considering several project ideas/initiatives, currently in initiation phase.

NOOSA WILD KOALA INITIATIVE

Our vision is for the Noosa Biosphere Reserve to be a safe haven for wild koalas and to be known as Australia's leading koala conservation community.

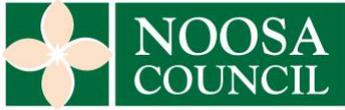
The NBRF will launch a new campaign to seek investment partners and donors to fund groundbreaking new conservation initiatives for vulnerable koalas in the Noosa region. The Noosa Wild Koala Initiative and Fund will see NBRF working with stakeholders in 2022 to develop a shared vision to create a Shire-wide koala conservation, research and education initiative in the Noosa Biosphere Reserve.

Significant progress for Noosa's koalas is already being made by several stakeholders, including the rollout of a Phase 3 trial of koala chlamydia vaccination by University of the Sunshine Coast; and the Yurol-Ringtall State Forests Conservation Project by Noosa Shire Council and Noosa Parks Association, where 2,400ha of plantation state forest will be transferred into National Park, with revegetation efforts being supported by Noosa & District Landcare Group and Queensland Koala Crusaders.





Our partners & supporters





Appendix A: Projects

Glossy Black-Cockatoo Bioacoustics Monitoring

Bioacoustics monitoring of Glossy Black-Cockatoo nesting sites for habitat conservation in the Noosa Biosphere Reserve.

Status: In progress

The Glossy Black-Cockatoo *Calyptorhynchus lathamii* is a rare and threatened species, listed as vulnerable in Queensland. The Noosa Biosphere Reserve is considered a significant habitat of this black cockatoo with up to one third of the entire known population located in the region.

Glossy Black-Cockatoos are extremely loyal to their habitat and stay within their family groups. There are currently no known active or recorded, natural or artificial nesting sites in the Noosa Shire or Sunshine Coast. Thanks to citizen science observations achieved by the dedicated community at Sunrise Beach, we do know Glossies are breeding.

A key challenge in their recovery is breeding success. Pressures have been put on these large hollow dependant species by land clearing, logging, bush fires and fragmentation. The 2019 and 2020 bushfires in Peregian Springs and Coorobah impacted feed tree sites and habitat trees in the Noosa Shire.

This project will utilise bioacoustic sound recorders with software to monitor and analyse calls of the Glossy Black-Cockatoo. Identifying successful nesting sites will enable better support and conservation management for local Glossy populations. This research can inform feed tree revegetation, watering hole rehabilitation, habitat protection and further nesting box installation in identified Glossy Black Cockatoo critical zones.

Bioacoustic sound recording software was developed by Dr Daniella Teixeira and has been successfully used in other parts of the country, in particular on Kangaroo Island.

PROJECT OBJECTIVES

- Identify key Glossy Black-Cockatoo nesting sites in the Noosa Biosphere Reserve.
- New data on viable populations and key habitats in the Noosa Biosphere Reserve.
- Data collection of significant flora and fauna will be recorded within the reference zones.
- Document colonies from the hinterland to the coast. Identify family groups.
- Improve our knowledge of behavioural interactions between the Glossy Black-Cockatoos, the environment and key threatening processes
- Inform and support the Glossy Black-Cockatoo Resilience Action Plan in the Noosa Biosphere.
- Develop a new research technology and methodology that has potential to be replicated across species.

TIMELINE

Monitoring will take place during the breeding season between January to June 2022.

PROPONENT

Bushland Conservation Management

PARTNERS

Dr Daniella Teixeira, Noosa Shire Council, Sunshine Coast Council, University of the Sunshine Coast, Noosa and District Landcare, Glossy Black Conservancy, various Noosa Shire community conservation groups.



Tackling Eco-Anxiety

Tackling eco-anxiety in young people aged 18 – 28 through tree planting and off-setting transport emissions in the Noosa Shire.

Status: In progress

This PhD research project is studying the relatively new topic “eco-anxiety”, about which there is limited academic literature, despite a recognition that “eco-anxiety” is a growing problem. It will contribute new knowledge about the best ways to intervene to alleviate eco-anxiety and change behaviours to reduce the atmospheric burden of carbon dioxide.

The study will examine how tree planting to offset participants’ own transport emissions could be used to assist in reducing eco-anxiety as well as understanding how eco-anxiety could be used to foster proactive sustainable behaviours in an under-represented population.

It will examine levels of “eco-anxiety” within a group of 120 people aged 18 -28 years old in Noosa. Levels of participants’ eco-anxiety and pro-environmental behaviours will be measured pre- and post-intervention and analysed for trends. A sub-group of up to ten participants from each of the two intervention groups will also be interviewed to gain further understanding of their experience with eco-anxiety and the impact of the interventions.

PROJECT OBJECTIVES

This study will contribute to collaborative management of the Noosa Biosphere by:

- 1) The tree planting exercise will have a direct impact on enhancing the biodiversity and natural systems of the biosphere by regenerating designated areas within the biosphere, using tree species indigenous to the biosphere
- 2) A large tree planting exercise will assist in Noosa’s carbon drawdown, contributing to Zero Emissions Noosa’s target to be net zero emissions by 2026.

TIMELINE

This project’s tree planting activation is due to commence in early 2022 with post-intervention surveys and interviews later in the year.

PROPONENT

Central Queensland University



Keep on Keeping it in Kin Kin

A Noosa Catchment erosion remediation program. Phase 2.

Status: Completed

The Keep on Keeping it in Kin Kin project continued the erosion repair program to support water quality in the Kin Kin catchment and Noosa river system.

Due to its historical and current land use and geological characteristics, the Kin Kin catchment is the major contributor of sediment to the Noosa catchment. Results of the study undertaken during Phase 1 of the Keeping it in Kin Kin project confirmed significant and serious erosion is occurring in Kin Kin. Such erosion is detrimental to biodiversity, fisheries habitat, water quality and agricultural productivity.

Phase 2 of the project is all about getting on the ground and fixing it.

The project prioritised and implemented strategic on-ground works to protect and repair erosion-prone areas. These areas were identified in Phase 1 by satellite analysis as having mobilised 2.4 million cubic tones of soil in recent years. That's equivalent to almost 191,284 large dual axel soil delivery trucks or 765 Olympic-sized swimming pools filled with soil. On-ground works will rehabilitate vulnerable soil structures in priority locations.

The project builds capacity and awareness of the problem in the wider community by coordinated community engagement activities. External investment will be continually sought through a developed grant framework. An innovative new water quality event monitoring system will also be trialled as part of the project.

PROJECT OUTCOMES

- Extension services to landholders
- Continued direct management of invasive weeds including strategic cats-claw creeper on-ground work
- Community workshops and engagement activities
- Grants framework for further funding
- Trial water quality event monitoring system with Healthy Land & Water
- This initial project resulted in an additional \$49,887 federal funding from the Smart Farms Small Grants program to continue Phase 3 of this program of work by Noosa & District Landcare.

TIMELINE

Completed in July 2020.

PROPONENT

Noosa & District Landcare

PARTNERS

Noosa Shire Council, Healthy Land & Water, Noosa Parks Association, Noosa Integrated Catchment Association, Country Noosa



Noosa Oyster Reef Restoration Trial

A pilot study to re-establish a lost habitat in the Noosa River system.

Status: Completed

Globally, 85% of oyster reefs have become extinct as a result of over-harvesting, disease, and poor water quality. Lost oyster reefs are commonly replaced with habitats that provide less food or poorer protection from predators for fish, such as bare muds and sands. These profound habitat changes typically result in sharp declines in fish diversity and biomass, severely impacting fisheries. For these reasons, oyster reefs are being restored in many locations worldwide.

After a century of decline, the Noosa Oyster Reef Restoration Trial project aims to assess the effectiveness of re-establishing a lost aquatic habitat and remediate the Noosa River system using trial oyster reef installations made of 'sausage shaped' hessian bags filled with recycled oyster shells – a novel design by researchers at the University of the Sunshine Coast.

This project is one of three components of the broader Bring Back the Fish research program, a joint initiative of the Noosa Biosphere Reserve Foundation, Noosa Parks Association and The Thomas Foundation. Bring Back the Fish aims to progressively re-establish and restore resilient natural aquatic ecosystems in the Noosa Estuary, River and Lakes system.

PROJECT OUTCOMES

- 14 artificial trial oyster reefs installed in the Noosa River system in November 2017.
- Monitoring of the reefs in May 2018 showed strong recruitment of juvenile oysters, with vigorous growth recorded by November 2018, only one year after installation.
- All reefs had spat settlement with an average of 300 spat per square metre in May 2018. By October 2019 we recorded an average of 350 new oysters per m² of shell and up to 538/m² at one of the best performing sites.
- Ongoing monitoring demonstrated that there is good settlement of baby oysters and that they can survive.
- This pilot study resulted in a \$2.4m project partnership between Noosa Council and world-leading conservation organisation, The Nature Conservancy to permanently restore Noosa River's oyster reefs.
- A further \$20m federal funding Reef Builder partnership with The Nature Conservancy will support oyster restoration projects across Australia, with Noosa being the only project in Queensland.

TIMELINE

Completed in October 2020

PROPONENT

Noosa Parks Association and The Thomas Foundation

PARTNERS

University of the Sunshine Coast, Noosa Shire Council, Ecological Service Professionals.



Biodiversity in the Noosa River

An assessment of prawn and estuarine biodiversity recovery in the Noosa River.

Status: Completed

The Noosa River and Lakes system and Laguna Bay were once teeming with marine life, however the Noosa River lower estuary and river mouth has changed extensively through human activity. A current lack of knowledge of estuarine health and biodiversity levels in the Noosa estuary hinders our ability to detect declines and limits effective estuarine management.

The Biodiversity in the Noosa River project aims to study the benthic layer and river biodiversity to assess the viability of restoring prawn stocks in the Noosa River and Lakes.

The Biodiversity in the Noosa River project is the third component of the broader Bring Back the Fish research program, a joint initiative of the Noosa Biosphere Reserve Foundation, Noosa Parks Association and The Thomas Foundation. Bring Back the Fish aims to progressively re-establish and restore resilient natural aquatic ecosystems in the Noosa Estuary, River and Lakes system through three key priorities: Biodiversity in the Noosa River, Noosa Oyster Reef Restoration Trial and Keeping it in Kin Kin.

PROJECT OUTCOMES

- Establish a baseline understanding of the environmental condition and biodiversity of the Noosa River estuary to enable the identification of future declines and associated causes, and to assist in effective estuarine and fisheries management.
- Develop a suitable method and map of the various human threats likely to impact estuarine diversity in the Noosa Estuary.
- Provide possible management recommendations and implications to reduce the potential impact of fine sediment throughout the system.
- Assessment outcomes to be reviewed by Noosa Council for future river management.

TIMELINE

Completed in 2020.

PROPONENT

Noosa Parks Association and The Thomas Foundation.

PARTNERS

The University of Queensland, Murdoch University, Noosa Shire Council, Ecological Service Professionals.



Discovering Noosa's Native Oyster Diversity

Assessing natural oyster resources in the Noosa River to restore a functional estuary.

Status: Completed

Shellfish reefs are culturally, economically, and ecologically important but have almost entirely disappeared from Australia's coastlines. In the Noosa River estuary, oysters were once abundant but have not recovered since over-harvesting in the late 19th century. The Noosa estuary appears to be a melting pot for both warm and cool climate species, and although a variety of oysters have been recorded, DNA evidence is required for confident identification. Due to differences in the biology and habitat preferences of oyster species some are likely to be more suitable for shellfish reef restoration projects than others, but this knowledge of which oyster to use and when is limited for places like Noosa.

In this project, Griffith University used traditional collection methods as well as CSI-like environmental DNA technology to test the diversity of species present, building on the existing knowledgebase developed through NBRF and its research partners in existing projects.

This project also evaluated which surfaces are best for a range of oyster species to settle on. To do this, a few different types of settlement plates and dead oyster shell were deployed over the 2019 Summer to catch baby oysters. Despite the dry conditions, quite a few oysters were caught around the estuary and genetic analyses was able to determine their identity. This critical genetic information will be used to provide a key for future monitoring and for the assessment of oyster diversity throughout the Noosa estuary.

This critical genetic information will be used to provide a key for future monitoring and assessment of oyster diversity throughout the Noosa estuary.

PROJECT OUTCOMES

- Evaluate the distribution and diversity of oyster species within the Noosa River estuary.
- Evaluate oyster settlement preferences
- Identify key shellfish species and documented genetic determination of oyster biodiversity in the Noosa River. The findings are expected to lead to improved design and efficiency and efficacy of current and future restoration efforts aimed at reviving these lost or threatened ecosystems.
- The results of this research will inform ongoing restoration projects, including Noosa Council's oyster restoration program with The Nature Conservancy. The project was led by Dr Carmel McDougall (Griffith

University) and supported by Dr Simon Walker (Ecological Service Professionals).

- Minimally, there are four species of rock oyster present in the estuary. These include *Saccostrea glomerata* (the Sydney rock oyster), *Saccostrea lineage B*, *Saccostrea lineage G*, and *Ostrea equestris*.
- Oyster diversity appears to be higher near the river mouth than in the upper reaches, with *Saccostrea glomerata* the sole species present upstream (Lake Cooribah mouth).
- Several other native shellfish were identified in the estuary, including pearl oysters (*Pinctada albina/nigra* species complex), hairy mussel (*Trichomya hirsuta*) and leaf oyster (*Isognomon ehippium*, identified by morphology only).
- eDNA has been established as a useful technique for the initial detection of species within an estuary, however other methods are preferred for fine scale distribution assessments.

TIMELINE

Completed in May 2021.

PROPONENT

Griffith University

PARTNERS

Ecological Service Professionals (ESP)



Koala Forever Noosa

Securing the future of wild koalas in the Noosa Biosphere Reserve.

Status: Completed

The Koala Forever Noosa project aims to determine whether vegetation connectivity translates to koala connectivity to ensure safe movement of koalas across the landscape.

In partnership with WWF Australia, this project focuses on vegetation corridors within the Noosa Biosphere Reserve, as well as informing the potential establishment of a functional corridor extending beyond the biosphere – Brisbane to Fraser Coast.

The project contributes to a broader understanding of corridors that are important to koalas in Noosa seeking to inform conservation management and future eco-tourism ventures.

Having completed the Mapping Koala Health study determining koala distribution across the Noosa Biosphere Reserve, the project will build on this knowledge to support practical solutions for management of important vegetation corridors for koalas.

Recognising the importance of habitat, and connection of populations for genetic exchange, this project will deliver practical conservation outcomes as well as opportunities for wild koala eco-tourism.

PROJECT OUTCOMES

- Specific objectives of the project are to establish:
- Whether existing vegetation corridors are being utilised by koalas
- Key connected koala populations suitable for long-term non-invasive monitoring and management
- Key locations for restoring koala and vegetation connectivity
- Key locations for sustainable wild koala eco-tourism and recreation
- An initial blueprint for sustainable wild koala eco-tourism and recreation.

TIMELINE

Completed in October 2020.

PROPONENT

University of the Sunshine Coast

PARTNERS

WWF Australia, Noosa Parks Association



Noosa Environmental Education Hub

A world-class environmental education hub delivering curriculum extension opportunities related to the Noosa Biosphere Reserve.

Status: Completed

The Noosa Environmental Education Hub (Noosa EEHub) has a vision to become a world-class environmental education hub delivering curriculum extension opportunities that provide connection between the Noosa Biosphere Reserve and community.

The Hub will offer rolling-term programs that immerse young people and their school communities in Noosa Biosphere Reserve education linked to the Australian Curriculum. Localised programs are practical ensuring students are not only learning theoretical information about the Noosa Biosphere but physically engage in the natural biosphere, exploring and theorising about the state of our environment. Students are provided with opportunities to deliver grassroots projects to restore the biodiversity within their communities through community-based partnerships and empower our young people to have a voice and take action on issues of importance to their local environs.

Funding for this project allows Noosa EEHub to develop the centre's capacity while piloting programs with local schools within the Noosa Biosphere Reserve.

PROJECT OUTCOMES

- Term 3 2019 – practical curriculum extension pilot program for Noosa District High School Grade 9 Science.
- Term 4 2019 – practical curriculum extension pilot program for Grades 9 Humanities Good Shepard Lutheran College.
- Term 1 2020 – Sunshine Beach State High School, Good Shepard Lutheran College.
- Term 2 2020 – Sunshine Beach State High School, Good Shepard Lutheran College and Noosaville, Cooroy and Tewantin Primary Schools. Montessori Noosa – Aboriginal Led Sustainability Education. (Postponed due to COVID-19)

Further to this project, the Noosa EEHub received a Federal Government Bushfire Recovery Grant of \$149,750 in 2021 to engage Year 9 students at Sunshine Beach High, Noosa District High and St Theresa's College to aid the Noosa Biosphere's recovery process.

TIMELINE

Completed in November 2020.

PROPONENT

Noosa Environmental Education Hub



Appendix B: Audit

Attached separately.

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