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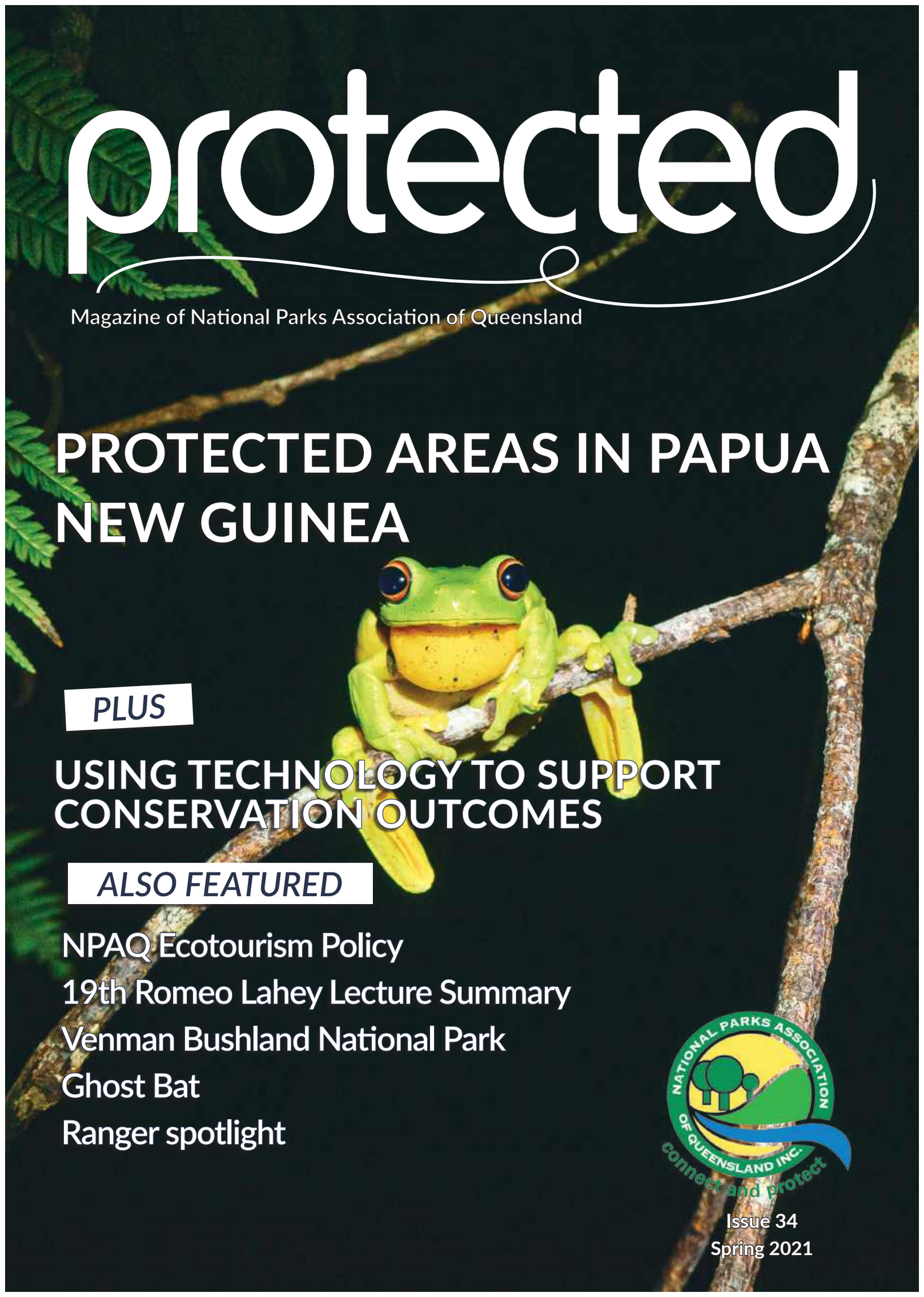
Magazine of National Parks Association of Queensland



PROTECTED AREAS IN PAPUA NEW GUINEA

PLUS

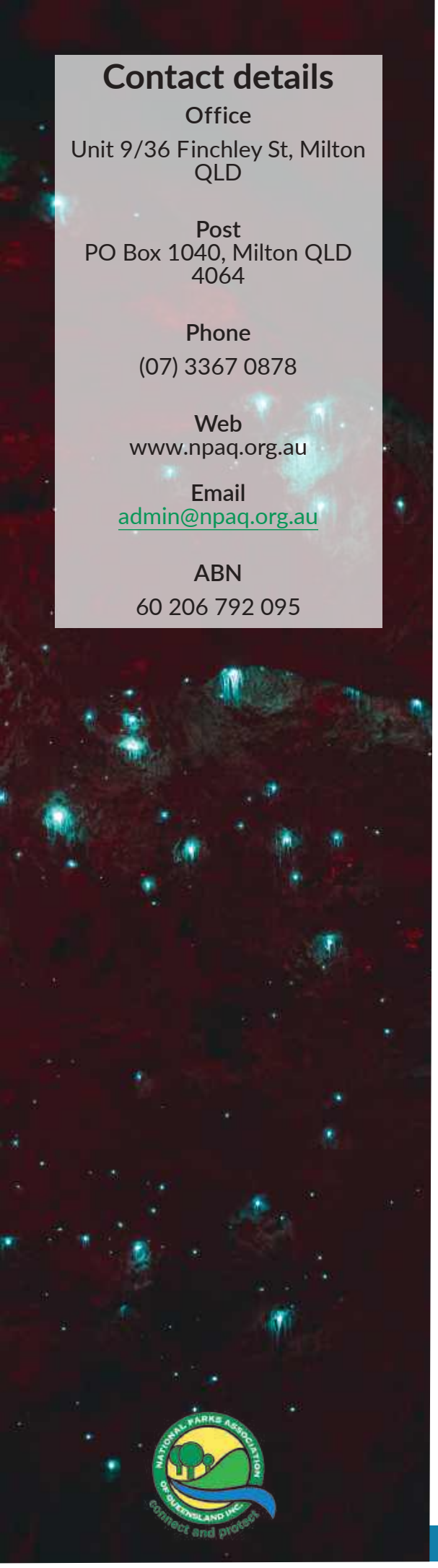
USING TECHNOLOGY TO SUPPORT CONSERVATION OUTCOMES

ALSO FEATURED

NPAQ Ecotourism Policy
19th Romeo Lahey Lecture Summary
Venman Bushland National Park
Ghost Bat
Ranger spotlight

National Parks Association of Queensland Inc.
Connect and protect

Issue 34
Spring 2021



Contact details

Office

Unit 9/36 Finchley St, Milton QLD

Post

PO Box 1040, Milton QLD 4064

Phone

(07) 3367 0878

Web

www.npaq.org.au

Email

admin@npaq.org.au

ABN

60 206 792 095

About NPAQ

Our Purpose

The National Parks Association of Queensland (NPAQ) promotes the preservation, expansion, good management and presentation of National Parks, and supports nature

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Images

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Banner Photo (left): *Arachnocampa flava* (Ben Blanche)

Editor Samantha Smith

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Photo: Gregory Peterson

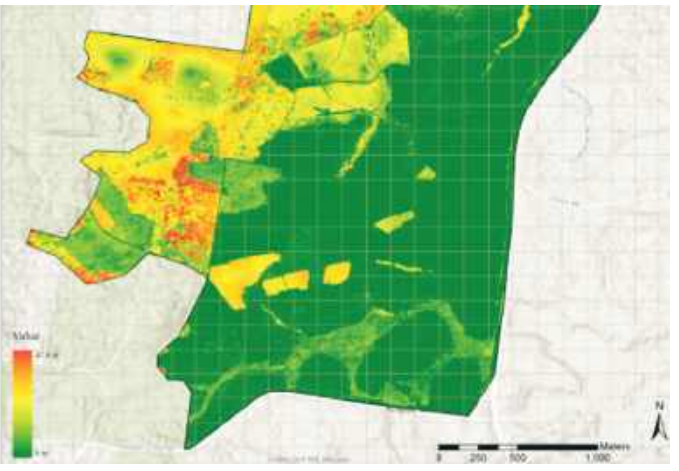

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Photo: Dr Ekatarina Ovsyanikova

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Photo: Jeff Simons (provided)

FROM THE PRESIDENT

Susanne Cooper

Welcome to 2022 – a year of unpredictability, but still with many opportunities for positive change.

It is interesting to reflect on how various issues connected to national parks evolve. One that has seen major change recently is the names and management of national parks reflecting their long connection to Indigenous peoples over thousands of years.

We have seen changes in the names of iconic and much loved national parks- for example the sand islands of south east Queensland. 'Straddie' (North Stradbroke Island), Moreton Island and Fraser Island are now known as Minjerribah, Mulgumpin and K'gari respectively.

The Butchulla people gathered to celebrate the renaming of Fraser Island to the K'gari World Heritage Area in September 2021. It won't be long until these names are common parlance among Australians. I remember growing up referring to Ayers Rock and Katherine Gorge in Central Australia; very few people now would recognise, let alone use these names, with Uluru and Nitmiluk widely accepted.

The names of the national parks on these islands have also changed as follows:

· Moreton Island National Park - Gheebelum Coonungai ('Lightnings' Playground') National Park.

· North Stradbroke Island National Park - Naree Budjong Djara ('My Mother Earth') National Park

Joint management plans with the State Government and local Aboriginal groups have been, or are in the process of being developed.

You may well ask what's in a name – and why is a name-change so significant? Indigenous place names link Traditional Country to the history, culture and people that have been a part of the land for many thousands of years. Instead of Fraser Island being named after a woman (Eliza Fraser) spending only a few months on the island in 1836 after a shipwreck, the island now is known as K'gari – the name chosen by the Butchulla people as it is the sky spirit the island was created from. Aboriginal history of these areas dates back at least 25,000 years, so re-adoption of Indigenous place names signifies the history and culture that long pre-dates colonisation. Importantly, many Indigenous peoples regard this not as re-naming, but as re-claiming. This reaffirms and celebrates the rich history that is unique to Australia – we have the oldest living cultures in the world. Something to acknowledge, cherish and celebrate. It is entirely appropriate we recognise this in our national parks.

There has also been considerable progress in Cape York to return ownership and management to local Aboriginal Traditional Owners through changing the tenure of identified properties to Aboriginal freehold land. Existing national parks are also being converted to jointly managed parks as Cape York Peninsula Aboriginal Land (CYPAL), with Aboriginal freehold as the underlying tenure.

To date, 22 national parks in Cape York have been converted to jointly managed areas, totalling nearly 1.53 million hectares. This includes the iconic Daintree National Park (CYPAL).

It will be interesting to see the progress and future changes in returning to the original Aboriginal names and joint management of national parks not just in Queensland, but across Australia.

I hope you continue to enjoy the experience and connection with nature in our unique national parks

Photos Banner & inline (above) : Moreton Island (Samantha Smith)

SHARE YOUR PHOTOS

Do you have photos from a visit to a national park or protected area? Send them to admin@npaq.org.au or connect with us on Instagram @nationalparksassocqld for your chance to feature in the next edition of NPAQ's PROTECTED Magazine! The best photos will also be featured on NPAQ social media channels and go in the draw to win some awesome NPAQ prizes*.

Binna Burra, Lamington NP
Mitchell Prior (@mitchellprior - Instagram)

Northbrook Gorge
(@courtlalala - Instagram)

Wallaby with her joey
Andrew Thompson

Jumping Spider (*Cosmophasis micarioides*)
Samantha Smith

PROTECTED AREAS

- Gregory Peterson

Customary landowners in Papua New Guinea (PNG) are the backbone of a protected area (PA) network that strives to balance the sometimes-competing demands of biodiversity conservation, sustainable livelihoods and cultural traditions.

PNG occupies the eastern part of the island of New Guinea and includes several large islands. It shares a land border with Indonesia and marine borders with Solomon Islands and Australia. Although the Australian island of Saibai in the Torres Strait is only a few kilometres from the PNG mainland, Australians may not know much about its PA network.

The country's diverse physical geography includes a central mountain range that has the country's tallest peak, Mt. Wilhelm at 4,509 metres. The biodiversity is significant. It is estimated that about 5 percent of global biodiversity is represented in the 1 percent of the world's land area that is PNG. The population of nearly nine million people is largely rural, living a traditional village lifestyle engaging in subsistence agriculture and small-scale cash cropping. About 97% of the land area of PNG is owned by customary landowners.

The PA network of PNG includes national parks like Mt. Wilhelm; memorial parks like Cape Wom; and historical reserves such as the Kokoda Track. However, the great majority of PAs are Wildlife Management Areas (WMAs) that are largely initiated by customary landholders. Most of the country's 22 provinces have at least one PA.

The locally initiated PAs have a common theme underpinning why customary landowners sought official government recognition. Protection of the natural habitat for future generations is an often broadly stated goal of customary landowners. Protecting the land/sea assists in helping to maintain traditional customs, languages and knowledge. More specifically, this protection may be to maintain a breeding area for species like flying fox, cassowary (muruk), turtle and bird of paradise (kumul), whose feathers are used by dancers in ceremonial occasions. Conserving biodiversity also provides opportunities for sustainable livelihoods and community development activities like hunting, market gardens and tourism. Customary landowners often live within the boundaries of their PA where traditional management practices have been in place for generations.
During 2016-17 a management effectiveness survey was undertaken of most PAs in PNG. It required a small group of customary landowners from each PA to answer a series of questions about their area. The survey covered: key values and benefits; threats; management effectiveness; and trends.

Customary landowners were enthusiastic about the values and benefits of their PA. The most often mentioned value was the natural environment.
The WMA is our 'mama graun' (mother earth). It has kumuls (bird of paradise), tree kangaroos, cassowaries, wallabies, lizards, fish, eels, prawns. It has diverse biodiversity and several rare and threatened species. It has mountains with caves and waterfalls. We form an association with mama graun. Our survival depends on this and we need to protect this land, the forest and the animals (Mojirau WMA).

Next in importance was the socio-economic values (livelihood and commercial). Hunting takes place, but it is governed by traditional rules and the impact is low. There are allocated places for hunting and restrictions on the numbers that can be killed (Klampun WMA).

The third most mentioned value was cultural.
We use our protected area to teach our children about the land and wildlife. There is a sacred place for the wallaby. Wallabies have a special meeting place, and they have a leader (usually smaller than the other wallabies), and the wallabies gather and 'listen' to the small wallaby (Garu WMA).

S IN PAPUA NEW

These statements from customary landowners reinforce the interdependence and close connection PNG people have with their natural environment.

The most frequently reported threat across the country's PAs was climate change and severe weather.
The traditional calendar for planting and hunting has been affected (by climate change) (Tavolo WMA).
The villages on the coast now flood at the high tide (Tonda WMA).

Other threats are invasive species, population increase and expanded settlements, logging, mining, oil palm plantations, landslides, erosion, coral bleaching, lack of government support, loss of cultural values, knowledge and traditions, geological events, illegal harvesting of marine resources and hunting by neighbouring villages that are outside the protected area.
The WMA is surrounded by developments – a Special Agricultural Business Lease on one side and an oil palm plantation on the other. The community is working to protect and maintain their forested environment in the WMA (Chair, Tavolo WMA Management Committee).

The survey revealed several shortcomings at all levels from village to national government level. Overall progress in achieving high levels of management effectiveness across the PA network is very limited. Only four of the 58 PAs demonstrated 'very good' progress and all four receive significant funding from government and non-government sources. Three WMAs reported 'good' progress and display strong and committed leadership, very effective management committees, or have success in gaining assistance and support from NGOs. Most of the remaining PAs struggle to deliver even basic management. Despite limited progress, the majority of PAs estimated that their values were in a good or very good condition. While there has been loss and degradation of natural vegetation in most PAs, it has been largely from small scale clearing and settlement. This impact can be reduced significantly through strong management and assistance with enforcement.

Customary landowners express sound and achievable ideas to reinvigorate the PA network. Filling the funding gap takes priority, followed by a need to enhance the effectiveness of management committees, develop management plans, train rangers, facilitate research, increase the number of women and youth on committees, and initiate education and awareness programs. The list is long, but the common thread is an absence of funding and engagement by government and NGOs.

The revitalisation of the PA network has community backing because there is a strong desire to protect and continue their languages, traditions and culture including the preservation of sacred and spiritual places. The promotion of sustainable and self-reliant livelihoods would be warmly embraced by all PAs. If we do not protect rare, threatened and endangered species now, they will not be there for the children. They will only be heard about in our legends (Maza WMA).

This sentiment has relevance beyond a remote protected area in PNG.

Photo Banner: Canoe Madang Lagoon (Gregory Peterson
Photo Inline (left) : Sustainable Hedresses Variarata (Gregory Peterson)
Photo Inline (right) : Sunset Kimbe Bay (Gregory Peterson)

USING TECHNOLOGY T CONSERVATION OUTC

- Dr Ekaterina Ovsyanikova, Megan Winsen, Assoc. Prof. Grant Hamilton

School of Biology and Environmental Science, Faculty of Science, QUT

Accurate and regular and monitoring is fundamental to wildlife conservation. If we don't know what animals are in an area, and how many there are, it is difficult to manage them or the area well. Even obtaining a baseline for species' abundance can be hindered by the cost and logistics of collecting the data in the field. Traditional methods for gathering such data are usually labour-intensive and involve trained experts walking through the scrub and making direct observations. With ever greater pressure on conservation budgets, finding more efficient methodologies for data collection is essential.

Methodologies that combine the use of imagery collected from aerial platforms (either manned aircraft or unmanned drones), together with sophisticated analytical tools such as artificial intelligence (AI) algorithms, are revolutionising wildlife and vegetation monitoring. Such methods enable large areas of terrain to be covered in a relatively short time and can produce more accurate results than manual surveys. Importantly, the use of technology also creates a digital record that can be archived and accessed into the future.

Queensland University of Technology has been at the forefront of developing these high-tech methods for conservation. Associate Professor Grant Hamilton and his team were the world first to pioneer the use of drones and AI for the detection of koalas in the complex environments in which they live. They are now extending this methodology to detect deer, macropods and a range of other species.

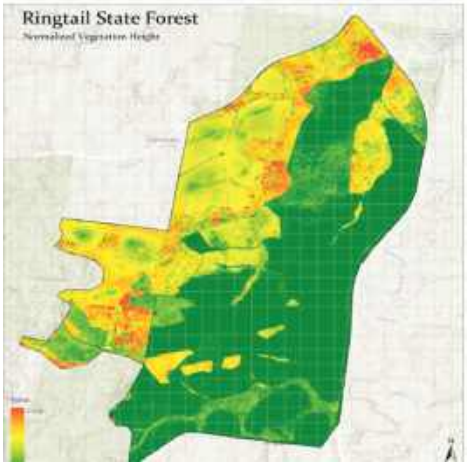
Conducting surveys using drones allows for large areas to be covered quickly, and processing the data collected using AI algorithms means a much more rapid and accurate analysis than can be achieved by people alone. Our goal is to support conservation by providing land managers with the tools to make informed decisions about the preservation of the habitat.

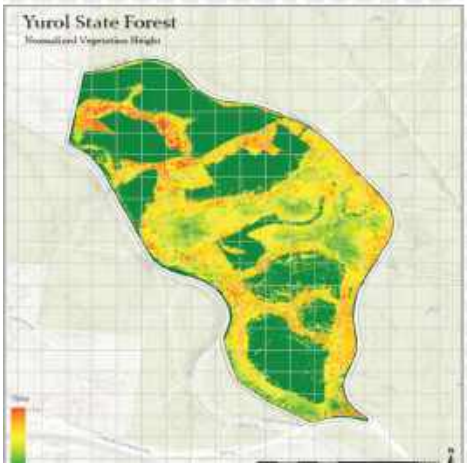
One of our most recent projects was an assessment of vegetation structure and koala abundance for the Yurol-Ringtail State Forests Conservation Project. This project is one of the most significant recent conservation developments in South-East Queensland. It is a collaboration between the Queensland Government, the Kabi Kabi people, Noosa Council, HQPlantations and Noosa Parks Association with the aim to convert 2,400ha of Kabi Kabi country that is currently state forest into a national park by 2027. The creation of this national park will allow the preservation of valuable habitat for many threatened and endangered species of birds and animals. In order to transition these valuable areas, historically used as a timber plantation, into a national park, it is crucial to establish a baseline for the vegetation structure and animal distribution in both locations.

To assess the vegetation structure of Yurol and Ringtail State Forests, the team conducted remote sensing surveys to quantify vegetation height and canopy cover. Images were collected using a light aircraft equipped with a high-resolution camera. The aircraft flew transects over the study area, collecting many overlapping images of the terrain and vegetation.

Using GPS coordinates, all images were geo-referenced (linked to an exact location on the map) and compiled into an orthomosaic – a very high-resolution image reconstruction of the forest (like Google Earth, but much more detailed). Because images of the vegetation were taken from different angles, automated algorithms could be used to create a 3D model, representing the terrain and height of the vegetation above it. The resulting canopy height model provided a precise baseline of the vegetation structure in Yurol and Ringtail State Forests, which is extremely important for the future monitoring of vegetation recovery during the transition to national park. As some of these areas are still currently used as timber plantations, monitoring vegetation rehabilitation and regrowth is critically important to

TO SUPPORT COMES





An orthomosaic (photographic representation of the landscape from stitched aerial imagery) of the Yurol and Ringtail state forests (left), and the output Canopy Height Model for both areas (right). Different colours denote vegetation height, red being the higher value.

ensure that habitat is recovering.

In addition to the vegetation assessment, our team conducted koala population surveys using drone-based thermal imagery. Koalas as well as other animals stand out in the imagery because they have a higher body temperature than the surrounding vegetation. Our artificial intelligence algorithms have been trained to automatically recognise koalas in thermal drone footage and the precision of detections is higher than that of the ground-based surveys.

A koala detected in thermal drone imagery using the AI algorithm.

Projects such as the Yurol-Ringtail vegetation and koala survey highlight the importance of using cutting-edge technology in conservation efforts. An assessment of this scale and precision could not be rapidly achieved using land-based survey techniques.

Additionally, this methodology is repeatable down to using the same drone flight paths, which allows conservation managers to conduct regular monitoring of vegetation and analyse its trends. We are continuing to develop new algorithms to analyse remote sensing data to more efficiently address a variety of conservation challenges. Our goal is to make this technology available to a wide range of stakeholders in the field of conservation. It can benefit existing national parks by providing an opportunity to monitor wildlife and vegetation on a much broader scale, more frequently, and thus to evaluate population trends more accurately. It could also contribute to the management of areas that do not have the protected status of National Parks, through monitoring rehabilitation of disturbed areas and vegetation establishment levels.

The preservation and restoration of natural habitats are paramount for the healthy future of our planet. The use of new technologies developed in recent years allows us to conduct monitoring more efficiently, less invasively, and at a much lower cost. We hope to contribute to a future where these developments are used extensively and contribute to conservation efforts worldwide.

We wish to acknowledge the support of the Research Engineering Facility (REF) team at QUT for the provision of expertise and research infrastructure in the enablement of this project.

Email for communication: g.hamilton@qut.edu.au

Photo Banner & Inline : Ekatarina Ovsyanikova (provided)

19TH ROMEO LAHEY LECTURE SUMMARY

- Steve Noakes

**The following are exerpts from the 19th Romeo Lahey Memorial Lecture presented by Steve Noakes - the full lecture is available on the NPAQ website.*

The 2021 Romeo Lahey Memorial Lecture was the 19th such presentation of a tradition that commenced over a half century ago - in 1969 - to honour the memory of Romeo Watkins Lahey who served as founding President of NPAQ for three decades, from 1930 to 1961.

Romeo Watkins Lahey was born in Pimpama in 1887, attended Brisbane Grammar School from 1901 to 1903 and worked as a clerk with the Australian Mutual Provident Society in Brisbane before completing his Engineering degree at the University of Sydney in 1914.

It was a few days before 19,000 hectares of the new Lamington National Park was gazetted, that Romeo enlisted in the Australian Imperial Force, 11th Field Company on 26 July, 1915.

Before he went off to the Great War in Europe, in October 1915 Romeo delivered a lecture to the Royal Geographical Society of Australasia Queensland Branch titled 'Some reasons why national parks should be established in Queensland, with special reference to Lamington National Park'. In that address he not only called for other large areas of Queensland to be reserved as national parks but also called for an extension of the state forest system. 105 years later this remains a similar message from today's NPAQ!

For almost six decades up to the 1970s, he was instrumental in convincing successive Queensland Governments to declare many of the state's national parks.

At the first NPAQ meeting in 1930, Romeo Lahey was elected President and Arthur Groom the Secretary. Romeo was also co-founder of Binna Burra Lodge, located within the world heritage listed Lamington National Park.

A biography on Romeo held by the Australian National University notes: *'Small but dynamic, modest but self-assured, quiet but tenacious, Lahey was in Arthur Groom's words 'a thorny problem to many who have not seen eye to eye with him'.*

Let me make a comment about the historical context of why our venue was selected for this 19th Romeo Lahey Memorial Lecture.

The European settlement of Queensland started with a penal colony in Redcliffe in 1824. Due to the scarcity of food and water, about one year later, the site for the penal encampment was moved along the Brisbane River to where the Brisbane CBD now exists. Over 100 years later, on 8 April 1930, this Brisbane City Hall was officially opened by then Governor Sir John Goodwin. One week later, Governor Goodwin returned to this building along with almost 100 people to attend the inaugural meeting of the National Parks Association of Queensland - held in the Lord Mayor's Reception Room - on 15th April, 1930.

Today, a similar number of people - with more casual attire - who have crossed over into this newmillennium have come together in the same building for another significant NPAQ event.

At the inaugural NPAQ Romeo Lahey Memorial Lecture held in 1969, Mr R. Allen Clelland said:

'Queensland Holiday Resorts was established on 3rd March 1934 by members of the National Parks Association for the sole purpose of giving the public access to that end of Lamington. It was not long after that Queensland Holiday Resorts became known as Binna Burra Lodge and its connection with NPAQ is reflected in the original objectives of the company which included reference to 'the ideals of the National Parks Association of Queensland'.

The original lodge building at Binna Burra was Leighton House built in Canungra in 1902 and owned by the Lahey family. When the Spanish Flu reached Australia after the First World War, the house was used for patients who were impacted by the pandemic.

In 1934 it was transported piece by piece on horseback up the track to Mt Roberts and became the initial central building of Binna Burra Lodge. Over the years it was adapted to become the Binna Burra Lodge reception, lounge and small shop until it was burnt down in the bushfires on Sunday 8 September 2019.

I am sure that the people of the generation represented by Romeo Lahey who formed the National Parks Association of Queensland at a meeting held in this building in 1930 would be comforted to see its evolution now as Queensland's oldest non-governmental environmental organisation.

In 2021 we can all celebrate the 91 years of advocacy for Queensland's protected areas by the NPAQ - driven by science, professional expertise, impartial scrutiny and trusted relationships.

Photo Banner : Romeo Lahey (NAPQ Archives)

NPAQ ACTIVITIES REVIEW FOR 2020-21

- Len Lowry

2020-21 continued to be a challenging year for activities with short, sharp lockdowns to minimize the spread of Covid-19 causing cancellation of some activities.

The extended Bird Outing to Nanango was the largest activity to fall victim to Covid but was rescheduled for September, 2021.

Notwithstanding the uncertainties and difficulties, activities went ahead where possible. In total, 38 activities were conducted in total, attended by 311 members and 38 non-members.

Day Activities

Apart from the Easter camp, all activities that went ahead were day activities including 13 day walks, most of which were in national parks, 2 social activities and 1 biking activity.

Fraser Island Sand Blow : JB

Bunya Trail : Yvonne Parsons

Bird Outings

10 out of the proposed 12 planned events went ahead with one day outing and the extended outing casualties of Covid. Bird Group activities are consistently popular with over 20 people in attendance on some occasions. The details of all sightings were submitted regularly to eBird Australia in keeping with the citizens-science objectives of the group.

Female Regent Bowerbird (*Sericulus chrysocephalus*) : Karen Langton

Supurb Parrot (*Polytelis swainsonii*) : Unknown

Rufous Fantail (*Rhipidura rufifrons*) : Unknown

Eastern Spnebill (*Acanthorhynchus tenuirostris*) : Paul Donatiu

Revegetation Project

All 10 of the proposed 10 working bees were conducted clearing exotic weeds from the Boombana area of D'Aguilar National Park and replanting with native plants of the area.

Spear Lily (*Doryanthes palmeri)* : Paul Donatiu

New Year Twilight Walk

26 people attended this event, making it the most popular, single activity for the year. Members see it as an opportunity to chat and catch-up in a relaxed atmosphere.

Volunteers

Sincere thanks to the volunteer leaders who organize and lead these activities. They give generously of their time and knowledge to raise people's awareness of national parks and their importance in maintaining a balance between the natural environment and the built environment. Thank you, one and all.

**The above was an exerpt from the NPAQ 2020-21 Annual Report. The full document is available on the NPAQ website.*

Photo Banner : Supplied (Samantha Smith)

ECOTOURISM IN NATI

- National Parks Association of QLD Inc. (NPAQ)

What is Ecotourism?

Ecotourism encompasses nature-based activities that increase visitor appreciation and understanding of natural and cultural values.

They are experiences that are managed to ensure they are ecologically, economically and socially sustainable, contributing to the conservation of the natural areas and the well-being of local communities where they operate.

NPAQ recognises that there is increasing demand for access to national parks for a range of tourism and recreational pursuits.

Sensitive, appropriate facilities and activities will likely expand the range of people who connect with, and become more appreciative of natural and cultural values, leading to broader community support for national parks. This can represent a benefit to the park, regional economies and the tourism industry.

NPAQ's view

Developments and activities that merely use national parks as a scenic backdrop to their activities can cause detrimental impacts on an area and place undue stress on limited park management resources.

NPAQ does not support inappropriate developments and/or activities which are in conflict with the purpose of national parks – the conservation and appreciation of nature and cultural values. Most inappropriate developments tend to be exclusive accommodation where the focus is on food and luxury rather than appreciation of the national park.

With ever-increasing pressures on the national park system, any ecotourism facilities or activities within national parks must align with leading practice to avoid degradation of the park values and visitor experience.

As such, ecotourism facilities and activities in national parks should have minimal impact and be carefully monitored to ensure that:

- Conservation and cultural values are central to the activity and not compromised;
- The integrity of the national park is maintained;
- Independent visitors' enjoyment is not infringed.

NPAQ's position

The following approach must be applied when considering ecotourism developments.

1. Accommodation is best located adjacent to or near national parks, rather than within. Supporting infrastructure within national parks is to be temporary in nature and suitable for easy removal.

2. When needed to support genuine ecotourism activities, accommodation within national parks is to be low key, sensitively designed, in harmony with the surrounding landscape, and should avoid exclusive use of sections of the park. NPAQ is a proud supporter of our First Nations people and their traditional lands.

3. Servicing of accommodation/ facilities is to have minimal impact and be restricted to limited periods to minimise disturbance to wildlife and visitor experience. Mandatory orientation and authentic interpretation is to be provided and reinforced during visitor activities to achieve experiences based upon appreciation and respect of natural and cultural values. All messages and material are to be approved by QPWS.

4. Infrastructure such as walking tracks and lookouts are to have minimal impact and are to be thoughtfully designed to reflect local conditions of slope, soil, vegetation and visibility.

5. High impact and thrill-seeking activities are not supported or endorsed.

6. Thorough, transparent and independent impact assessment is to be undertaken with enforceable conditions to ensure natural and cultural values are properly protected.

7. An upfront bond is provided equal to the full cost of rectifying significant risks, including decommissioning of infrastructure and rehabilitation.

8. The activities/facilities environmental effects are monitored, assessed for risk, and reported on an annual basis, including any necessary remedial measures. To be publicly available upon request.

9. Revenue generated for Government should be proportional to the development and activity, be directed to national parks management and publicly reported.

10. A cap on visitor numbers is applied based upon ecological resilience and maintaining visitor experience.

ONAL PARKS

NPAQ will refer to the following table as an indicative guide to acceptability of ecotourism proposals in national parks.

High impact with no obvious compatibility with national park values	Potential impacts dependent on details of proposal	Negligible / low impact and supportive of national park values
Trail biking	Commercial rafting, trail running	Guided walks / board walks / surfaced trails
Downhill / adventure / thrill seeking mountain biking	Commercial fixed camp sites	Camping in designated areas
Zip lining/ bungy jumping	Soft adventure e.g. climbing / canoeing / abseiling	Guided activities e.g. bird watching / nature walks / cultural interpretation
Adventure 4WDing	Tracks for access to remote sites and facilities	Low key vehicle access to designated sites
Horse riding	Accommodation supporting genuine ecotourism activities	Education
Competitive events	Long distance touring / leisure cycling	Photography
Use of drones	Canopy walks	-

A full copy of the NPAQ Ecotourism Policy can be found on the NPAQ website - https://npaq.org.au/npaq-organisational-rules-and-policies/

Note: Policy developed based on NPAQ's Ecotourism and Queensland National Parks - An Investigation of Supported Walks in National Parks: Issues and Recommendations (Aug. 2018) by L. Hahn, G. Bartrim, S. Cooper and D. Walter.

NPAQ is a proud supporter of our First Nations people and their traditional lands.

PARK IN FOCUS

Venman Bushland National Park

Venman Bushland National Park is one of the largest remaining areas of eucalypt forest in the coastal lowlands near Brisbane, making this an important habitat for koalas and other wildlife. The park is located on Mount Cotton on Biripi land and is just 15 minutes drive from either the popular Logan Hyperdome or Capalaba.

Park History

The Venman Bushland National Park was originally used as a logging area before being bought and later transformed by Jack Venman.

Jack grew up in Kingaroy with his 2 parents and 4 siblings. Although he was a qualified engineer, he spent a lot of time working on cattle stations and moving around the Brisbane area. Eventually he set up a shop as a fitter and turner in Upper Mount Gravatt. After working there a number of years, he eventually decided to return to his old love, working on a cattle station.

In 1954 Jack bought a 255 lot of land used for logging in Mount Cotton for 510 pounds to run his cattle farm. Unfortunately, after 5 years of running his cattle farm, he was forced to find work elsewhere. It was during this time that he revisited a lot of old cattle stations he once worked on and noticed the degradation of the areas from poor practices.

After finally being able to settle on this Mt Cotton property In 1970, Jack was offered 48.6ha in Tallebudgera in exchange for his land by a subdivision company. But Jack wanted the land to be restored and protected, not divided up into smaller lots and sold for development. So at the age of 60 in 1971, he sold his land to the local council (Albert Shire) for $1 so it could be managed as bushland and provide a sanctuary for native fauna and flora.

Jack dedicated 12 years as the caretaker of the park before retiring in 1975. During his time as caretaker he created walking tracks, picnic tables, fire breaks and stone barbecues for visitors to use when they came to visit the park. In 1992, the Department of National Parks and Wildlife included the property in a coordinated conservation area that includes Daisy Hill Forest and Corbould Reserve.

The Venman Bushland National Park was officially named in Jack's honor after he passed away in 1994 at the age of 83 from an extended battle with cancer. The national park is now 415ha and is managed by the Queensland Parks and Wildlife Service.

Native Fauna and Flora

The Venman Bushland National Park's defining feature is its abundance of eucalyptus trees and koalas, but it is also home to kangaroos, wallabies, possums, monitor lizards and a wide variety of birds and insects. There are event native fish and eastern water dragons in and around the Tingalpa Creek that runs though the park.

'The place has generated a peace and tranquility all of its own. People come here to enjoy the peaceful atmosphere—the tranquil bush' (Jack Venman, cited in Walding 1992).

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Photo Banner & Inline : Supplied (Samantha Smith)

WILDLIFE FEATURE

Ghost Bats - The World's 3rd Largest

- Jeff Simons

This iconic animal is endemic to Australia and is our largest micro-bat with a wingspan of 60 cm! That is to say, despite its size, it is not a mega-bat, and so is not a member of the Flying Fox group. It is the world's 3rd largest micro-bat.

Micro Bats have two different types of ultrasonic echo-location (sonar) by which they find their way around and locate and catch prey. In one version the signal is emitted through the mouth, much as we speak or cry out. These are known as vocal emissions. Although the Ghost Bat emits loud audible cries, these are not part of its echo-location system.

The Ghost Bat is a nasal emitter, so its echo-location signals come through the nostrils. Our human nearest equivalent would be to hum. So, to improve this less powerful signal, nasal emitting bats appear to have developed nose-leaves and even bigger ears to capture the returning echoes. All echo-locating bats have disproportionally larger ears than other equivalent sized mammals. But nasal emitting bats, such as the Ghost Bat have even bigger ears. The nose-leaf acts like a reflector on a car headlamp, condensing the signal and making it directional. Imagine a car lamp bulb without a reflector, with the light dispersed weakly in all directions, which would be without the benefit of a directional beam.

Photo Banner & Inline : Ghost Bat (*Macroderma gigas*) - Supplied (Jeff Simons)

Those enormous ears are the receptors for echo signals. The Ghost Bats ears are so large that they are joined for about a third of their height to provide mechanical stiffening so they don't collapse in the slipstream caused by the animal's flight speed. Without the information input from erect ears the animal's navigation abilities would be impaired, and likely result in unintended collisions.

From photographs of Ghost Bats in flight, it can be noticed that the head is held horizontally, even though the animal is executing a turn with the rest of its body tilted (while banking). Placing a spirit level across the tips of the ears in a correctly oriented photograph will demonstrate this behaviour. It is the sole representative of its genus Macroderma.

Worldwide there are 5 species in 3 genera in the family Megadermatidae, of which the Australian Ghost Bat is the largest.

The Ghost Bat behaves like an owl, and is an opportunistic predator. It has feeding roost stations where it can dismember prey relatively free from disturbance. Although it may hunt on moonlit nights, it avoids hunting in direct moonlight. This suggests avoidance of a sighted predator. Prey can consist of large insects, small reptiles and mammals, and small birds

up to the size of an Owlet Nightjar. Detritus found below feeding roost stations, if they are in sheltered locations such as caves, can provide information on food sources. Debris lost below feeding roosts in forested sites would usually be submerged by leaf-fall.

This brilliant animal has conspicuous eyes, and it is reasonable to infer that vision plays an important role in its life. Their fur colouring can be variable and is often marked fairly conventionally with a darker back (dorsal), and a paler coloured belly (ventral), similar to a Kookaburra. Investigations by the Queensland Museum at Riversleigh, has revealed fossils of the ancestors of Ghost Bats dated to 20 million years ago.

The Mount Etna based population in central Queensland has suffered a dramatic decline, going from 150 animals in the 1980's to a mere 40 now. I have the impression that some small populations throughout northern Australia have already disappeared, and other larger populations seem to be suffering significant reductions.

There is an urgent need to stridently address all the threatening processes, to arrest their slide to oblivion after existing here for more than 20 million years.

NATIONAL PARK EXPERIENCE

- Samantha Smith

One of my favourite day trips as a child was to go to Tamborine Mountain. The magic of the rainforest walks and natural beauty of the area always captivated my imagination and made me feel like I was entering a secret place from a fantasy novel. In many ways, I still have that same feeling now when I visit.

I remember on our drives up the mountain we would turn off any music and wind down the car windows to smell the fresh air and listen to the birds in the forest around the road. The views even from the car window are fantastic and there were always a number of small waterfalls next to the road in some places after rain.

One of my families favourite places to go on Tamborine when I was younger was of course, Gallery Walk. The foods, gemstones and local crafts always had me spending most, if not all of my pocket money! Sometimes we would stop at Thunderbird Park on our way home for ice cream and a swim in Cedar Creek. I'm fairly sure it was searching for thunder eggs in Thunderbird Park that started my love of minerals and gemstones.

As an adult I still enjoy Gallery Walk however, it's the rainforest walks and the chance they provide for me to practice my photography that I most enjoy now. With waterfalls, stunning views, unique wildlife and ancient trees in one area, what more could an amateur photographer want?!

I love to visit all the walks on the mountain, of which there are many. One of my favourite walks is the Cedar Creek Rock Pools. The major appeal is of course the natural rock pools at the bottom of the walk where you can picnic and go for a refreshing swim. Being a marine scientist I'm always fascinated by aquatic life, both flora and fauna. Some of the pools at Cedar Creek have some really interesting types of algae (picture below) and shrimp living in them along with what I believe are flecks of ore suspeded in the water.

I also enjoy going for an evening walk at Curtis Falls with hopes of photographing some animals that aren't usually out during the day or when there are lots of people. I also love to look at the glow worms sprinkled along the trail edges. They're difficult to see but if you look hard enough there are hundreds tucked away in the walls.

Whilst each walking trail in the Tamborine National Park are great, I believe it is the variety of ecosystems and contrasts between walks that make the area truly unique and special. Once you've been to Witches Falls and seen the diversity of the plants and animals, it's not hard to see why this area was chosen as the first national park in Queensland in 1908.

Photo Banner & Inline : Mount Tamborine National Park - Supplied (Samantha Smith)

RANGER SPOTLIGHT

Insights into the diverse backgrounds and day-to-day activities of Queensland's park rangers

Hank Schinkel
Queensland Parks & Wildlife Service (QPWS)

Hank Schinkel is a Ranger with the Queensland Parks and Wildlife Service based in Townsville. Hank has always had a passion for looking after the environment, so right out of school he set his sights on becoming a Ranger...

Why did you decide to become a Ranger?

I always appreciated being outdoors as a kid and grew up on farm in New Zealand. I attended bushwalking and outdoors pursuits – an outdoors education centre that pushed you hard and I loved the activity, bushwalking and mountaineering. I was captivated by the work people were doing to preserve natural places and that was it for me, I was caught!

How long have you worked in national parks?

I've been a Ranger all my career, after school I got my first job with New Zealand parks as a field officer. This job involved cleaning a lot of toilets and doing the rubbish runs! In New Zealand, to become a Ranger, you had to do a year of field work and then complete the Diploma of Parks and Recreation at university, which involved four years of theory and practical placements in parks.

I spent 5 years as a Ranger in New Zealand, before catching the travel bug and making my way to Townsville in north Queensland. It was pretty hard to get into Queensland Parks back then, so I headed to Tasmania and ended up working in parks there for 16 years. I then moved to the Northern Territory with Parks Australia for 8 years, before moving back to Queensland. In 2020, I was excited to take up the Ranger position in Rinyirru (Lakefield) National Park (Cape York Peninsula Aboriginal Land). So, all up, I've been a Ranger for about 31 years!

Which parks have you worked in?

For all my working years I have In New Zealand I worked in Tongariro National Park, in central North Island based around three major volcanoes. I absolutely loved it there working with volcanologists. I also worked in Westland Tai Poutini National Park on the west coast of the South Island, a coastal to the alpine park; and Nelson Lakes National Park.

I was very keen to work with First Nations people. So, in The Northern Territory, I worked in Uluru-Kata Tjuta National Park, which was very remote and, for family reasons, moved to Kakadu National Park after two years.

Cradle Mountain – Lake St Clair National Park, was where I spent most of my years as a Ranger in Tasmania. In Queensland, I was acting Ranger in Charge at Rinyirru (Lakefield) National Park (Cape York Peninsula Aboriginal Land) located about 340km north of Cairns and recently I relocated back to Townsville to work as an Asset Ranger.

What is special about your current park?

Rinyirru (Lakefield) National Park (Cape York Peninsula Aboriginal Land) is such a vast expanse. For me, it has to be the wetlands during the wet season with the abundant bird life; and seeing the contrast in the landscape between the dry and wet – absolutely amazing!

What is your most memorable moment as a ranger?

My list: being part of flora and fauna It is really hard to put a finger on any one moment! The opportunities to work on Country and in different areas back in New Zealand were special. Working with Traditional Owners at Kakadu and Uluru, and having my family be able to experience this, was a major highlight—going out looking for bush tucker with the elders, my family and the kids just loved it!

An experience which always stood out to me, was after finishing work in Kakadu. We were flying back near the escarpment and this rain cloud came through—we were just flying right beside this curtain of rain while next to the edge of the escarpment. It was a moment that you could never anticipate or recreate again.

Just before I left Kakadu, one of the Traditional Owners wanted to take me on Country and he introduced me to Country. He took me to one of the sites... and the artwork. I've never seen artwork like that anywhere else. He was talking to me about the stories and what they meant to him. To me, that was so special, and some of those stories I can't repeat again. I never have and never will, because the whole of that knowledge belonged to him. You just never forget experiences like that – seeing the connection he had for Country, for land and for the stories.

Photo Banner & Above: QPWS Ranger Hank Schinkel with Rangers Jenny (L) and Anzac (R) at Captain Billy Landing, Heathlands Resources Reserve - © Queensland Government.

What is the best part about working in a National Park?

I have worked in a number of National Parks. What really makes it for me is the staff that I work with. We work in these amazing environments and it's the people that I work with that actually make it so special in the end; they all have the same goals about how they want to protect and manage the environment. Presenting the park to visitors is also something that I really enjoy.

Can you describe your favourite national parks experience?

Just recently, my wife and I hiked the Thorsborne Trail on Hinchinbrook Island National Park. Honestly, I was blown away by the variety within the track, and I just loved it. It's one of best walks I have done, and I've done a lot of walks in Tassie and other places. Rain during the night—beautiful days—we hiked it over five days. So, we didn't have to rush, and we thoroughly loved the variety.

What is your top tip for visitors to your park?

Preparation. We are in a remote area, you have to be self-sufficient and make sure you allow sufficient time for your trip. Do your planning and background research on the park.

NPAQ thanks Hank for taking time to answer our questions. We appreciate the work all QPWS rangers undertake in protecting Queensland's national parks.

WHAT'S ON

NPAQ activities

Twilight Celebration – Bowman Park, Bardon
Date: 30th January 2022
Meet: 2:30pm at 247 Simpsons Road , Bardon , Queensland , 4065 , Australia
Cost: $17
Leader: Laurelle Lowry (0480153617)

2021 Vegetation Management Group
Meet: 9:00am - the lower car park of Jolly's Lookout of D'Aguilar National Park.
What to bring: Gloves, protective clothing, eye protection, insect repellent, sunscreen, water, morning tea, and lunch.
Dates: 19 February 2022, 19 March 2022

Coomera River Circuit 2022
Date: 13th February 2022
Meet: 8am at 1069 Binna Burra Road , Beechmont, Qld , 4211
Cost: $5
Leader: Frank Freeman (0427 655 514)

Birdwatching Mungarra Reserve Petrie
Date: 20th March 2022
Meet: 7:30am at Affleck Ave , Petrie , Qld , 4502
Cost: $5
Leader: Geraldine Buchanan (3349 1109)

NPAQ events

Due to the COVID Omicron variant, NPAQ has made the decision to pospone our first members meeting to late February/March for the safety of our members.

The 2022 Easter Camp at Girraween has been scheduled for Friday 15th to Monday 18th April 2021! More information can be found on the NPAQ website: https://npaq.org.au/events/2022-easter-camp-at-girraween/

Closing Comments

NPAQ has some fantastic events planned for 2022 including seminars, family friendly events, bush walks, and members meetings. Be sure to keep your eyes on the NPAQ events page on the website - www.npaq.org.au for event announcements.

If you would like to receive notifications about any of these events, please email admin@npaq.org.au and request to be included in our events mailing list.

We look forward to sharing with you another successful year!

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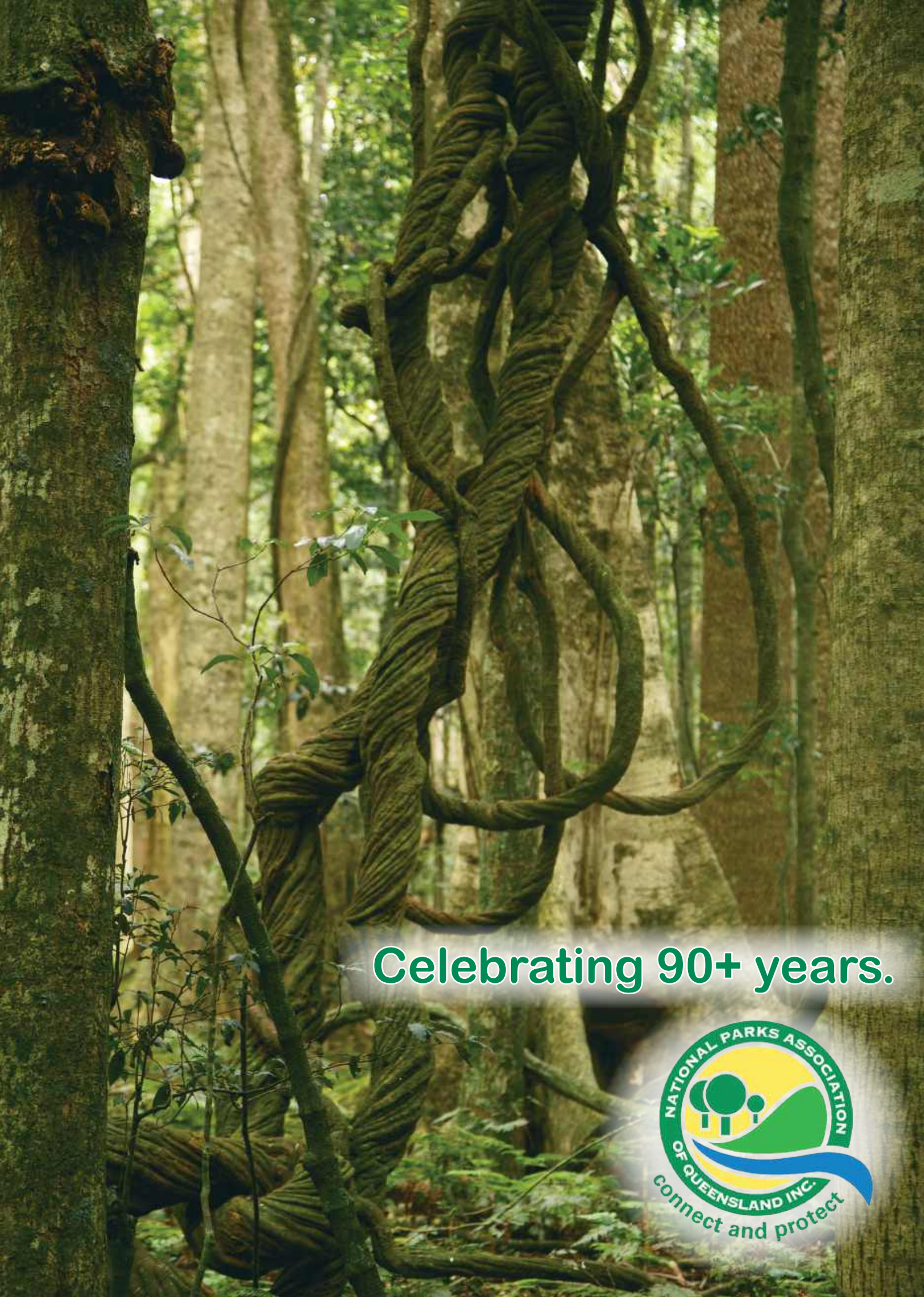
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