

protected

Magazine of National Parks Association of Queensland

understanding extinction

a great loss: bramble cay melomys
beyond the brink of recovery: extinction
welford national park
wave rock
eremophila tetraptera
the national park experience

Issue 11 October - November 2016



Connect and Protect



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Images

Cover and back page - Welford NP (Wendy Bell).
Strip p2 - Mountain White gum bark (*Eucalyptus dalrympleana* subsp. *heptantha*). (Paul Donatiu).

FROM THE PRESIDENT



Michelle Prior, NPAQ President

Welcome to the October/November edition of *Protected*.

The Annual Awards Event in September, saw eight members receiving the Romeo Lahey Recognition Award, for having attained 50 years of NPAQ membership: Barbara Brice, Dudley Dagg, Patricia Lawton, Hazel Noakes, Marjorie Semple, Lea Wood, Richard Wood. Thank you to these members for their involvement and commitment over this impressive length of time.

On behalf of NPAQ members, I would like to extend a hearty welcome to the four new Councillors elected at the AGM in September: Denis McMullen, Dr Alexis Wilson, Daniel Kelly and David Ball.

Thank you to all Councillors who were re-elected: Tony O'Brien (Vice-President), Athol Lester (Vice-President), Debra Marwedel (Honorary Secretary), Graham Riddell (Honorary Treasurer), and Yvonne Parsons (Assistant Secretary). Two Councillors continue in office for a further year: Richard Proudfoot and Julie Hainsworth.



Thank you to all Councillors for their contribution over the past year. In particular, I would like to thank the Executive: Debra, Graham, Yvonne and Athol. The restructure of last year has seen a substantial increase in the workload of the Executive, and they all rose to the challenge superbly, in addition to regular duties.

Thank you to retiring Councillors Peter Ogilvie and Des Whybird; and Councillors Mike Wilke and Geoff Lowes who retired during the year. Peter brought a wealth of protected area knowledge following 46 years in state government; Des brought extensive governance and strategic skills; Mike brought valuable strategic and governance skills; and Geoff brought professional legal skills.

NPAQ is fortunate to have 62 members and supporters who are active volunteers: Committee convenors and members, activities leaders, Boombana Vegetation Group, archives, Protected contributors, librarians; and those who provide professional or technical support, or assist with promotions, fundraising, mailouts and events. Thank you for your generosity.

I would like to thank retiring (Acting) Activities Convenor, Athol Lester. Athol has been involved in Activities since becoming a member in 2007, and has unfailingly led the Activities Committee for a number of years.

Bringing about necessary change is not always easy, and Athol did not shirk away from the task. A popular leader, well known for going that extra mile (such as serving billy tea and damper on a walk with wife Maria), he devised innovative activities such as camel treks and retracing Cunningham's footsteps.

NPAQ is fortunate to have a small-but highly dedicated staff team: Kirsty Leckie, Jeannie Rice, Marika Strand and Glenys Wilkinson. Thank you for your enthusiasm and passion for the Association, the creative solutions that you are always finding, your ability to cope with periods of intense pressure, and the professionalism you bring to your roles.

Thank you to the members and supporters who donated to NPAQ throughout the year, to assist with our advocacy and education work.

Many thanks to our wonderful sponsors: Scenic Rim Trail by Spicers, Yuraygir Walking Experiences, O'Reillys Rainforest Lodge, Binna Burra Lodge, Allure Stradbroke Resort, Australia Zoo, Great Walks magazine, Wild magazine, Avid Reader Bookstore, Easy Oven, Go Camping Australia magazine, Out and About for Kids magazine, and Rosco Canoes and Kayaks.

Thank you to all members and supporters for your passion and commitment to NPAQ, for caring about national parks and for understanding their value. National parks matter!



BRAMBLE CAY MELOMYS

Kirsty Leckie, Conservation Principal

Nestled in the vast expanse of the Great Barrier Reef is the small coral island of Bramble Cay. The relatively flat island has been subjected to periods of inundation over recent years. With rising sea levels came a loss of habitat and sources of food. For one of the island's smallest residents this has had a catastrophic effect.

The Bramble Cay melomys (*Melomys rubicola*), once reportedly abundant on the island has disappeared. Scientists say this is a cause for alarm as the world witnesses the first modern mammal driven to extinction by climate change. This article examines the extinction of the Bramble Cay melomys and attempts to understand what caused this great loss.

Bramble Cay and the biology of the Bramble Cay melomys

To understand this alarming extinction event, it is worthwhile examining the ecology of the Bramble Cay melomys and the coral atoll on which it was once endemic.

Bramble Cay, also known as Maizab Kaur, is a small (four hectare) island in the north-east Torres Strait. The island lies approximately 227 kilometres north-east of Cape York Peninsula. The island is an important rookery for green turtles (*Chelonia mydas*) and provides habitat for a variety of seabirds. Wind, waves and tidal movement combine to produce a dynamic environment of constant erosion and deposition.

The conservation and biodiversity values of Bramble Cay were further enhanced by the presence of *Melomys rubicola* which Limpus et al. (1983) described as the Great

Barrier Reef's only endemic mammal species. It is officially listed as endangered under both the *Nature Conservation (Wildlife) Regulation 2006* and the Commonwealth's *Environment Protection and Biodiversity Conservation Act 1999*. Interestingly, the International Union for Conservation of Nature (IUCN) lists the melomys as Critically Endangered.

In the most recent survey of the island (2014), vegetative cover was patchy and limited in area. Only two plant species were recorded, a succulent perennial herb (*Portulaca oleracea*) and an unidentified sedge (*Cyperus sp.*). Vegetation sustained damage due to trampling (birds), erosion and deposition. Woody debris was also noticeably different from previous surveys, resulting in further disturbance to the island's available habitat.

Bramble Cay's natural resources have been harvested and exploited over the years. The traditional custodians of the island are the Erubum Le (also known as the Erub or Darnley Islanders) who have visited the island for many years to harvest fish, turtles and birds.

There is also a history of European development on the island, including extraction of phosphatic rock and harvesting of biological resources. Bramble Cay has been the site of several navigational aids due the island's location at the northern entrance to the Great North East Channel.

How did the Bramble Cay melomys become extinct?

In 2014, an expert team conducted surveys to further understand the cay's physical environment, and with the explicit aim of establishing whether the species was still inhabiting the island (Gynther, Waller and Leung, 2016).

The team embarked on a thorough survey program including 900 small mammal trap nights, camera-trap surveys (where a motion-sensor infra-red camera is placed in key locations) and daytime searches.

These extensive efforts did not produce any positive signs of the mammal's presence on the island. Anecdotal evidence indicated that the last known live specimen was sighted in 2009.

Survey efforts also included



YS: A GREAT LOSS

measuring the extent of vegetative cover (as described above) and examining evidence of physical processes that had impacted on the island. Researchers found evidence of ocean inundation on multiple occasions.

These observations coupled with available information about sea-level rise and increased frequency and intensity of weather events led the team to deduce that climate change was the root cause of the Bramble Cay melomys' demise.

Further afield, efforts were made to survey other Torres Strait and Great Barrier Reef islands to no avail.

Threatening processes

Climate change is a somewhat nebulous term that has generated debate since being highlighted in the 1980's. Whilst debate continues today, there is growing consensus that sea levels are rising.

Rising sea levels have the potential to wreak havoc on island atolls and Bramble Cay is no exception. The island's elevation is approximately nine (9) metres above sea level, leaving little room for change.

Storm events and rising sea levels resulted in more frequent periods of inundation.

Added to the island's constant state of flux-was direct mortality from hunting and domestic dogs. Both activities would have added pressure to the survival of the dwindling population on the island.

Whilst some species can adapt and have adapted, to periodic or seasonal changes in conditions, others cannot. The result is a decline in population, or worse; extinction.

Extinction

Previous survey efforts on Bramble Cay (1998, 2002 and 2004) successfully recorded between 10 and 42 individuals.

The most recent survey did not yield any positive recordings of the species. As the island is a closed system, researchers agree there is little chance of the nil result obtained being a false positive (of extinction).

The news of the small mammal's extinction made headlines globally, as far away as the Washington Post.

What can we learn from the extinction of the Bramble Cay melomys

In 1983 Limpus et al. (in Gynther et al 2016) warned that the Bramble Cay melomys was in danger. The resident population of the small island was in decline, and had likely been on that trajectory since the 1970s.

Whilst the constant deposition and erosion on the island, and predation, would have placed pressure on the population, the evidence points overwhelmingly to inundation and rising sea levels as the primary cause of extinction.

This should not be the end of the



story for the Bramble Cay melomys. Instead, through education and further research we should aim to invest more in early recovery efforts and understanding all threatening processes, including climate change.

This can only be achieved via a collaborative partnership between researchers, government agencies, conservation organisations and the community.

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World's first mammals extinct in Australia due to climate change. (2016, June 14). EFE World News Service.

Images

Images via QPWS

BEYOND THE BRINK OF

Understanding extinction

Kirsty Leckie, Conservation Principal

The recent announcement regarding the extinction of the Bramble Cay melomys is cause for concern. Extinction can be viewed as a red flag for the natural environment, and indeed for humanity.

How does extinction occur? What can community and park managers learn from extinction events?

Are certain populations more vulnerable to extinction? How can further extinction events be prevented from occurring?

This article explores the concept of extinction by answering these questions, and examining case studies of different species.

Understanding extinction

Weddell (2002) defines extinction as 'when all representatives of a group have died, leaving no living descendants'. Extinction can be described and reported on a local or global scale.

From a population dynamics perspective, extinction occurs when losses (death, emigration, etc) consistently exceed gains (births, immigration).

Australia's fossil record indicates that over the millennia there have been numerous mass extinctions. From a global perspective, the most well-known is the disappearance of dinosaurs. Equally extensive, though perhaps less well-known was an earlier and more extensive mass extinction of marine invertebrates. During this event, it is estimated that 95% of the species of marine invertebrates disappeared (Weddell, 2002).

Whilst there is general consensus regarding the occurrence of mass

extinction and extinction events, the causes are less well understood and agreed upon.

Why do extinction events occur?

Fossil and geological records provide valuable information regarding the species which existed on earth during different periods in the past. Less well-understood and more contentious is understanding the events or circumstances that led to the extinction events described above.

The factors leading to populations declining or becoming extinct can be described as ultimate or proximate. Ultimate factors are described in more detail in the following section (Are certain species or populations more vulnerable to extinction?) and are the characteristics of a species (reproduction, ecology, behaviour etc). Proximate factors are short-term and encompass threats like exploitation, habitat change, pollution and introduction of exotics species.

The suddenness of the extinction events suggests both ultimate and proximate factors combine or overlap resulting in dramatic and widespread

change.

One example is over-exploitation, where a species is hunted to a point beyond the possibility of the population recovering (deaths and emigration is greater than births and immigration). This is not limited to contemporary times. Evidence suggests this type of over-exploitation may have existed in prehistoric times. Some scientists question this possibility, citing the primitive nature (and therefore effectiveness) and prehistoric weapons (Flannery, 1999).

Loss of habitat can also lead to local or global extinction. If a species is unable to adapt to the change in environment, the health and size of the population may suffer. In parallel if a species is unable to move to a new area (due to isolation, specialisation, etc), the species' population may decline to a point of no return and extinction.

Are certain species or populations more vulnerable to extinction?

As described above, proximate and ultimate factors can lead to extinction. The vulnerability of a species to



RECOVERY

extinction can be dependent on a range of these ultimate factors including specialisation, limited geographic range and limited dispersal activity. A single vulnerability factor is enough to boost a species' extinction risk.

On oceanic islands in Australia, plants have developed without pressure from grazing herbivores. The arrival of humans (along with grazing animals – sheep, goats, etc) placed huge pressure on the plant species endemic to the island environment, in some case beyond the point of recovery.

The size of a species geographic range is another factor to consider. Species with a small geographic range can suffer as habitat is cleared or damaged. For the Bramble Cay melomys, the results of environmental change were catastrophic to the population (see article in this issue of Protected).

At the opposite end of the spectrum are species with a large home range. Apex predators and those species with a high trophic level (at the top of the food chain) can suffer when detrimental changes occur in their home range. If populations of prey are adversely affected (populations decline etc), predators are unable to survive and go on to reproduce, resulting in a decline in population size and health. Another cause for concern for apex predators and those species with a high trophic level is bioaccumulation of toxins. Bioaccumulation occurs when species lower in the food web, ingest the toxins, and are then subsequently eaten by carnivores and omnivores higher up in the food chain, until ultimately they become prey for apex

predators. By this stage, toxins have built up to a point of inducing serious and often fatal consequences.

Conspicuousness (species is easily found and exploited) and high population densities can also contribute to vulnerability to extinction. If a species is easy to locate and harvest or consume, populations may suffer beyond the point of recovery. An example is humans capturing (and possibly over-exploiting) highly coloured species of fish or butterflies (both highly visible and highly attractive) to supply the aquarium/collectors trade.

High population densities can be the result of congregation for breeding and nesting. Unfortunately, this also makes the population vulnerable (and visible) to attack and harvesting by predators (including humans).

Should an extinction event be cause for concern?

As extinction events have occurred on numerous occasions in the past, why are scientists so concerned about recent extinction events? The answer lies in the underlying current conditions with increasing

development, environmental change and habitat loss. In the past, whilst extinctions have occurred, so has speciation. The flow of new species into the environment is not occurring at the same rates as in the past (Ehrlich and Ehrlich, 1985).

Whilst the debate continues about what may have caused mass extinctions of the past, it is important to keep in mind that extinction events are still occurring today. Researchers need continued support from government and communities to examine the current rate of decline of biodiversity to better understand the contributing factors and hopefully halt the rate of decline before it's too late.

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Images

Header image (Wendy Bell), Thylacine (Attard, 2012), Megafauna (via The Conversation).



PARK IN FOCUS

Welford National Park

Wendy Bell, NPAQ Hon. Life Member & Tour Leader

Recently 23 NPAQ members were fortunate to visit Welford during a brief fine-weather window in the flooding, drought-breaking rains of the wettest winter on record in Central West Queensland.

The landscape was becoming a carpet of green, patterned with a myriad of colourful wildflowers and coolibah-lined channels of life-giving water.

The Barcoo River, which forms the southern boundary of Welford National Park, was an impressive wide expanse of water, lined with river red gums.

In dry times it is just a series of billabongs and water-holes.

On the plains the Mitchell grass was beginning to grow again - future food for the Park's grazing wildlife.

Introducing Welford National Park

As one of the five gazetted Central West Queensland National Parks in the Cooper Creek catchment, Welford

is a vital refuge for wildlife with its diverse habitats and vegetation.

A former grazing property established in the 1880s, it became a National Park in 1992 to protect that diversity.

Within the boundaries of its 124,000 hectares there are vivid red sand dunes (the eastern edge of the Lake Eyre dune system), a variety of flora and fauna, history and remnants of Aboriginal visitation.

The Park landscape ranges from the Barcoo River and associated channels and waterholes, Mitchell grass plains and mulga woodlands, to a rocky escarpment and sand dunes dotted with tall white-barked ghost gums, green spinifex and, in good seasons, many wildflowers.

Location and access

Welford is accessible from Jundah, Blackall, Windorah and Quilpie.

The Jundah-Quilpie Road has two entrances to the National Park - the northern is 54 kilometres south of Jundah and the southern is 110

kilometres north of Windorah.

All access roads are unsealed (4WD advised) and impassable in wet weather. The Park is open all year but temperatures in summer can be extreme.

Park Headquarters is adjacent to the original homestead. There is a day-use picnic area and two designated camping areas (permit required). They are located on scenic 4WD routes in the Park.

History

Scattered remnants of Aboriginal visitation can be found and must be left undisturbed.

There is also evidence of a search for oil, with a bore drilled down to 2,500m in 1986. The bore now brings water from the artesian basin to the surface from 1,800m underground.

Welford homestead, built in 1882, is listed by the National Trust as one of only two pisé (rammed earth) houses in Queensland still occupied. It is used as National Parks staff quarters and is not open to the public.

Features & activities

Scenic 4WD routes enable exploration of the Park in dry seasons.

A 12 kilometre River Drive has a campsite at Little Boomerang Waterhole where boating, canoeing, kayaking and fishing (with a bag limit) are possible.

The 44 kilometre return Desert & Dune Drive provides access to walks on the red dunes, birdwatching and botanising.

A 54.5 kilometre loop road to the eastern section of the Park, the Mulga Drive, gives access to Sawyers Creek campsite and a climb up to a





lookout on the escarpment. Trafalgar Waterhole, a day-use picnic site on the river, is also accessible via this drive.

Flora and fauna

Wildlife watching can be rewarding as there are red and grey kangaroos, wallaroos, emus and the rare yellow-footed rock wallabies in the Park.

Birdlife is also varied - sighting a nesting wedge-tailed eagle was a highlight of the NPAQ visit.

Botanists too can find many species of interest. Some, including mountain yapunyah, poplar box and lancewood, are at the western edge of their range at Welford, one reason for its becoming a National Park.

There is much to appreciate and enjoy at Welford. However, as it is a remote National Park, all visitors must be totally self-sufficient, especially if camping.

There is no accommodation, food, fuel or mobile phone coverage available in the National Park.

No fires are permitted and all visitors are advised to carry ample drinking water.

Welford - a land of river channels and billabongs, sand dunes and plains, varied vegetation and a sanctuary for wildlife - a vital part of Queensland's western treasures - offers rewarding exploration.

References

Central West Queensland National Parks, available online via www.nprsr.qld.gov.au/parks/pdf/central-west-vg.pdf

Images

(From the top) over the dunes, Eremophila sp., emu with chicks, the group ascends the dunes, eagle's nest and ghost gum: Wendy Bell.

NPAQ would like to extend our sincere thanks to the QPWS staff for their warm welcome, expertise and time whilst our group was visiting the beautiful surrounds of Welford National Park.



FEATURED WALK

Wave Rock, Idalia National Park

Wendy Bell, NPAQ Hon. Life Member & Tour Leader

Idalia, one of the Central West Queensland National Parks in the Cooper Creek catchment, is 113 kilometres south-west of Blackall and is accessible in dry weather.

Established in 1990, the Park covers 144,000 hectares and was a former grazing property.

The topography includes the Gorman Ranges, the headwaters of the Bulloo River, dense mulga woodlands and colourful escarpments of weathered, residual coarse sandstone. Seven species of macropods are protected in the Park and koalas have been sighted.

Access and facilities

Visiting the Park is recommended in the cooler months as extreme heat can be experienced in the summer months. In wet weather the 4WD park track becomes impassable.

At Park Headquarters there is a comprehensive historical photographic display, a shelter shed and toilets.

No other facility or fuel, food or mobile phone coverage is available, but there is a basic camping area for tents and trailers.

Although the 4WD track through the Park gives access to several longer walks, the Old Idalia and Wave Rock walk from Park Headquarters offers an excellent cross-section of features in its 1.2 kilometres.

With care, active visitors can spend several more hours enjoying the scenery and the experience of ascending the escarpment.

Old Idalia

Remnants of the Park's grazing history can be found at the site of the stockmen's hut, including a wagon and a ship's tank which was used to store spring water for the cattle. Old Idalia is now regarded as an historic site, protecting these remnants of habitation.

Wave Rock

The Wave Rock track starts here and meanders through lancewood and dense mulga forest before descending into a watercourse, a delightful shaded gully alive with bird chatter from elusive treetop residents.

From the gully the track ascends through thick mulga on the slopes of the scarp, which is a visual delight, with boulders in odd weatherworn

shapes scattered everywhere.

Many of these rocks glow a brilliant orange in the sunlight. Passages through weatherworn slabs test a photographer's artistry as many of the boulders had rumbled down the escarpment slope to stop at a sturdy tree or lie in comical array on a ledge.

The trees are predominantly mountain yapunyah and lancewood and there is no ground cover vegetation on these slopes.

Wave Rock is a colourful eroded escarpment overhang approximately 100m long and, by scrambling up a short cleft in the rock, the view from the top enables one to appreciate the expanse and topography of the National Park in greater detail - a reward for the energy expended in the climb.

As the Park is the habitat of seven macropod species - red and grey kangaroos, wallaroos and four wallaby species (swamp, black-striped, yellow-footed and translocated bridled nailtails). There is always the possibility of seeing these species, but on Wave Rock at the time of this visit there were no signs of





resident macropods. This could have been due to an abundance of food elsewhere after rains.

Why visit Idalia?

With the diversity of landscape, history, vegetation and wildlife in the Central West Queensland National Parks, Idalia offers the a range of opportunities and activities.

Visitors can explore rugged escarpments with expansive views, indulge in spectacular photography and appreciate possible sightings of rare and endangered wildlife.

References

QPWS Central West Queensland National Parks

Images

(From top) view from Idalia, entering the park, native flora, Wave Rock, the group exploring the park, impressive rock formations, exploring: Wendy Bell



WILDLIFE FEATURE

Eremophila tetraptera

Emma Fitzsimmons, Project Officer

For photographers and nature lovers alike, a trip to the Queensland outback would not be complete without admiring the spectacular array of wildflowers that cover the sunburnt landscape in a blanket of colour following the seasonal rains. However despite their delicate blooms, the flowering plants of the outback are as resilient as they come with the ability to not only persist but thrive under conditions that most other plants cannot.

Eremophila tetraptera, aptly referred to as poverty bush, is one of these desert-loving plants that tolerates the harsh conditions brought by drought, fire, frost and floods. Other names for this species include fuchsia bush referring to its fuchsia-like bloom and emu bush for its palatability to the flightless bird which feeds on its small four-winged fruit.

Distribution and habitat

E. tetraptera is one of over 200 *Eremophila* species from the figwort family (Scrophulariaceae) that are endemic to semi-arid and arid regions of mainland Australia.



While most species of *Eremophila* occur in Western Australia, *E. tetraptera* can only be found along the Diamantina River system in Central West Queensland.

Diamantina National Park, which encompasses 507,000 hectares of Mitchell Grass Downs and Channel Country bioregions, reserves small scattered populations of this flowering shrub. Gidgee (*Acacia cambagei*) and perennial grasses are regularly associated with *E. tetraptera* and together form open shrubland communities often situated along drainage channels. However, it is the limestone outcrops within the park that are considered habitat of high conservation value for this species.

Biology and ecology

As a perennial plant that grows to a rounded shrub between 1 and 3 meters in height, *E. tetraptera* plays an important role as an understorey species in its arid environment.

Young branches and leaves are resinous and covered in glandular hairs before becoming smooth and thick as the plant matures. Its dull green, lance-shaped leaves are arranged alternately along the branches and are often clustered at the ends of short lateral branches.

Flowers are solitary with lobed petals joined at their base to form a tube approximately 1 inch in length. Petals are red to reddish-orange on the outside and a subtle yellowish-orange on the inside with red spots on the lowest lobe.

With four stamens that extend beyond the petal tube, *E. tetraptera* is well adapted to attract both insects and nectar-feeding birds for pollination. The fleshy, four-winged fruit are an

added attraction for long-distance seed dispersal species such as the emu. Flowering occurs between July and August and the fruit is generally ripe by late October once the fruit has developed from red to brown.

Threats

Listed as vulnerable in Queensland, *E. tetraptera* faces a number of potential threats that puts additional pressure on its already restricted distribution. Inappropriate fire regimes, grazing, invasive pasture grasses and excavation for gypsum mining are considered potential threats to the species habitat. While the impact of these threats are thought to be minimal, future research is required to enhance current monitoring efforts and investigate options for linking populations of high conservation priority.

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THE NATIONAL PARK EXPERIENCE

why national parks should be valued, told through the lens of personal experience in national parks

Emma Fitzsimmons, Project Officer

In June last year, I had the opportunity to travel through central and northern Queensland with 40 other like-minded students from the University of Queensland. Known as the 'Northern Tour', this two week field trip took us to some of Queensland's most unique national parks where we could not only examine the various management challenges facing these parks but appreciate what makes each park so special.

Our first stop was to Carnarvon Gorge; a semi-arid oasis nestled within Carnarvon National Park, Central Queensland. The steep sandstone cliffs, lush side gorges and meandering creek crossings are just some of the iconic features that make this park so enticing to visitors who wish to explore all that the park has to offer. While the sheer natural beauty of the rugged terrain is undeniable, the purpose of our visit was to gain a deeper understanding of why the park's rich cultural heritage makes Carnarvon Gorge such a unique place. Visiting the ancient rock art sites was the clear reminder we needed of the spiritual connection Aboriginal people, past and present, have with the gorge.



In fact, we all left acknowledging the entire park as a cultural landscape due to the many aspects of natural and cultural resources that supported Aboriginal people for thousands of years.

An eight hour trip north and a picturesque drive through Pioneer Valley saw us arrive at Eungella as our second national park destination. Despite being welcomed with heavy rain and gale-force winds upon arrival, all was forgiven the next morning when we woke to a breathtaking view that perfectly confirmed why Eungella means 'land of cloud'. As we watched low-lying cloud creep up the valley and shroud the rainforest around our campsite, I remember thinking that it couldn't get any more beautiful. Well, it did. Platypus were abundant in Broken River, electric-blue Azure Kingfishers were a frequent sight and the rainforests were dense with immense epiphytic ferns that cling to heavily buttressed Mackay Tulip-Oaks and strangler figs. The ecological diversity of the park was truly astounding and I left certain that we had just experienced a little slice of heaven on earth.

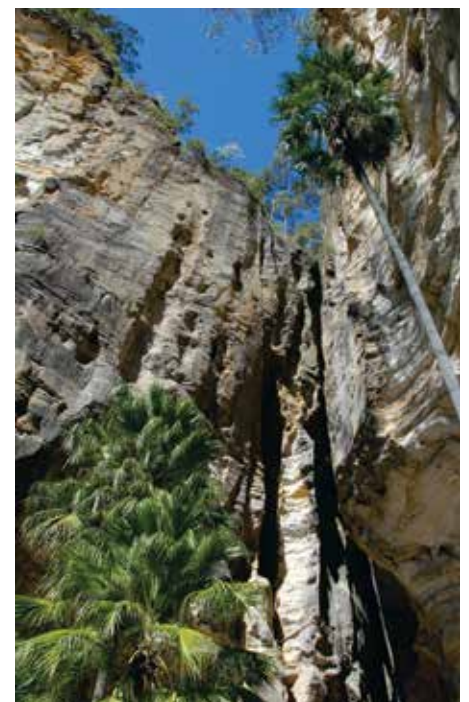
Our trip came to an end in Airlie Beach but not before a much anticipated day trip to the Whitsunday Islands. While we enjoyed a stroll along Whitehaven Beach, a hike to Hill Inlet lookout and a snorkel over fringing coral reefs, we did so with hundreds of other tourists. However, despite the flocks of selfie-stick-holding tourists and commercial tourist operators, I was genuinely surprised at how pristine the Whitsunday Islands appeared on the surface. Perhaps a different story for the reef, but the turquoise water

and blinding white sand looked just as unreal as they do in photographs and I quickly understood why people travel from all over the world just to get a glimpse.

Carnarvon, Eungella and the Whitsundays each provided their own unique national park experience over the two week trip. I discovered that each park has its own management challenges whether it be protecting a wealth of cultural heritage, safeguarding threatened species or dealing with large numbers of visitors in high risk areas. Nevertheless, visiting each park demonstrated to me exactly why they are some of Australia's best national parks and worthy of everlasting protection.

Images

Header image - Whitsundays (Pablo Lopez), Carnarvon Gorge (Paul Donatiu)



SPOTLIGHT RANGER OF THE MONTH

Conway Burns (QPWS)

Background

Spotlight is a series focusing on QPWS rangers for NPAQs bi-monthly magazine Protected. Questions have been designed to provide an insight into the diverse backgrounds and day-to-day activities of Queensland's park rangers.

Conway Burns is a Ranger - based on Fraser Island.

When asked why he became a ranger, Conway replied: "I am a Butchulla man, Traditional Owner descendant of K'gari (Beautiful place/ Paradise-Fraser Island)."

"I am very spiritually connected with the country and working as a ranger on K'gari makes me feel strong and proud to represent my people. I've attended many schools over my younger schooling life but one in particular was a primary school in Gladstone called Kin Kora. We had to write a letter and put it in a time capsule that wasn't to be opened for 25 years. In my letter I stated 'that when I grow up I want to be a ranger on Fraser Island.'"



How long have you worked in national parks?

I've worked in national parks for the last 18 years and enjoyed every moment of it.

Which parks have you worked in?

I've only ever worked in the Great Sandy Region which has now changed to Coastal and Islands Region, where I work on Fraser Island National Park.

What is your most memorable moment?

In 2010 I put together a project where I mentored young Indigenous people in the basics of being a ranger, realigned 3km of walking tracks and also re-connect with country for 3 months.

The following year I put together a project called Djinang Djaa K'gari (Footprints on Paradise) which involved similar tasks to Great Walks; with the assistance of Community Solutions. The project was a success, with future employment with QPWS for the people who were involved.

I was presented with the Jono Walsh Award for excellence in mentoring in 2012.

Can you describe your favorite national parks experience?

My favourite experience is my spiritual connection with K'gari. There are sacred secret places on K'gari.

She is a female white spirit sent from sky country to help create the lands with Yindinjie (Rainbow Serpent) the creator of all. She is our provider and she provides a special experience for me every day and in return we protect and preserve her.

What is the best part about working in a national park?

Educating the public about general information and respect for country (K'gari).

What is your top tip for visitors to parks for bushwalking?

Wanya nyin yangu, wanai djinang djaa (Where ever you go, leave only footprints). Great walks, map and water.

What is your top tip for campers?

One of my main Butchulla Lores is "What's good for the country comes first!". Be dingo safe, give dingoes' space, K'gari is their place.

NPAQ would like to thanks Conway for his time and effort in answering our questions.

Thank you also to QPWS for their ongoing support and assistance.

We hope you enjoyed finding out more about one of Queensland's park rangers.



WHAT'S 25 IN

NPAQ Activities

Day Walk - Coomera River Circuit

Thursday 27 October 2016

Location: via Binna Burra, Lamington National Park

Grading: Medium

Leader: Fiona Campbell (0414 664 089)

Fee: \$5 for members and non-members

Meet at 8.45am for 9.00am start, Binna Burra top carpark near the café.

The track descends through rainforest to the Coomera River and follows the river upstream past several waterfalls. The track does cross the creek a few times mostly by rock hopping across. The track then takes us back up to the car park and the café to relax and enjoy a coffee.

Walk length 17kms on track (some tree roots and possible mud).

There are a couple of tree falls that need clambering over.

We should be back 3.30pm to 4pm.

Day Walk - Palm Grove and Jenyns Circuit

Sunday 6 November 2016

Location: Tamborine National Park

Grading: Easy

Leader: Geoff Lowes (0411 502 306)

Fee: \$5 for members and non-members

Meet at 9.45am for 10.00am start, Curtis Road carpark entrance.

Palm Grove Circuit can be accessed from Curtis Road. It has breathtaking rainforest scenery.

You will find strangler figs, piccabeen palms and wet sclerophyll forest.

The entire walk is under the tree canopy.

For more information, or to register for an activity, please go to our website:

www.npaq.org.au/events

Vegetation Management Group

Saturday 19 November 2016

Location: Meet at Jolly's Lookout carpark, D'Aguiar National Park

Grading: various

Leader: Angus McElnea (0429 854 446, or gus_mcelnea@hotmail.com)

Come and spend a couple of hours to help with lantana control and revegetation work in the Boombana and Jollys Lookout sections of D'Aguiar National Park, west of Brisbane.

Birding - Sandy Camp Road Reserve

Sunday 20 November 2016

Location: Sandy Camp Road Reserve, Lytton

Grading: Easy

Leader: Ian Peacock (07 3359 0318, 0416 943 280, ianpeacock@hotmail.com)

Fee: \$5 for members and non-members

Meet at 7.30 am, 115 Sandy Camp Road, Lytton, west of Bulgin Ave.

This area is known for the many species of birds found among a range of environments, including the reed beds, open water holes, scrub and grassy areas. There is a viewing shelter overlooking one the waterholes.

For a Christmas morning tea, we will move to the Wynnum foreshore.

Please bring a plate of goodies to share.

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NPAQ Events

Romeo Lahey Lecture

March 2017

Due to unforeseen circumstances, the Romeo Lahey Lecture has been postponed until March 2017.

Further details will be provided closer to the date.

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Vale

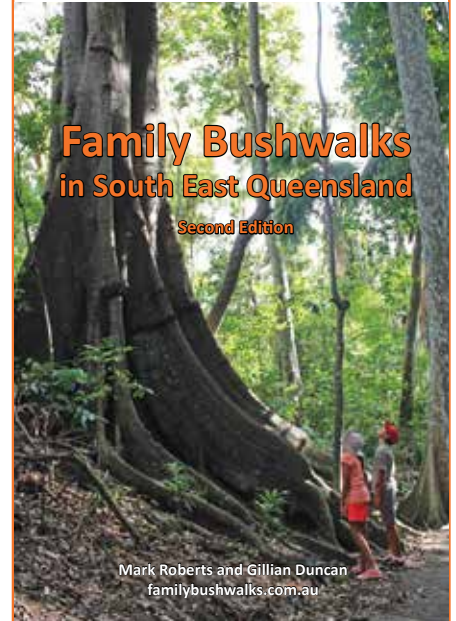
Our sincere condolences to the families and friends of Ellie Durbidge and Yvonne Herbert.

Ellie joined the Association in 1951, and became a life member in 1954.

Yvonne was the wife of former politician John Herbert. The John Herbert Memorial Award, granted each year for the state's most outstanding heritage project, is named in his honour.

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brand new detailed topographic maps of 300 easier, shorter, accessible bushwalks from Noosa to Toowoomba to Gold Coast delightful places you never knew about experiences for your family to remember a perfect gift for lovers of the outdoors



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Mark Roberts and Gillian Duncan
familybushwalks.com.au

the Second Edition of the bestselling book **Family Bushwalks in South East Queensland** including a new Toowoomba chapter is now available online at www.familybushwalks.com.au and from retailers throughout SEQ see our website for a list



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SUBSCRIBE, VOLUNTEER

www.npaq.org.au



People with passion can achieve great things!

For decades, NPAQ has been tirelessly working towards our goal: expanding and protecting Queensland's precious protected area estate.

Our dedicated team have identified new parks, lobbied for change and educated the public on protected areas.

Through these education, advocacy, research and engagement activities, we have connected people with nature.

This important work continues today fostering the next generation of protectors.

What can you do to help?

Lookout for our upcoming appeal and please support NPAQ by making a donation.

All donations are tax deductible as NPAQ is a registered Deductible Gift Recipient (DGR).

Your support will enable NPAQ to continue the great work we are doing to protect our parks.