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Front Cover: A vocal tiny songbird - the Mallee Emu-wren (Credit: Colin Cock).

Back Cover: The Mallee is home to the Little Pygmy Possum, Mallee Ningaui and the Red tailed Phascogale. In the background the resilient Bull Mallee or Eucalyptus behriana.

Above: Regent Parrot

Below: Resilient arid Mallee scrubland.

#### Foundation for National Parks & Wildlife

ABN 90 107 744 771

FNPW is the charity partner of Australia's National Parks. We're a non-government organisation on a mission to protect Australia's ecosystems and native species for generations to come.

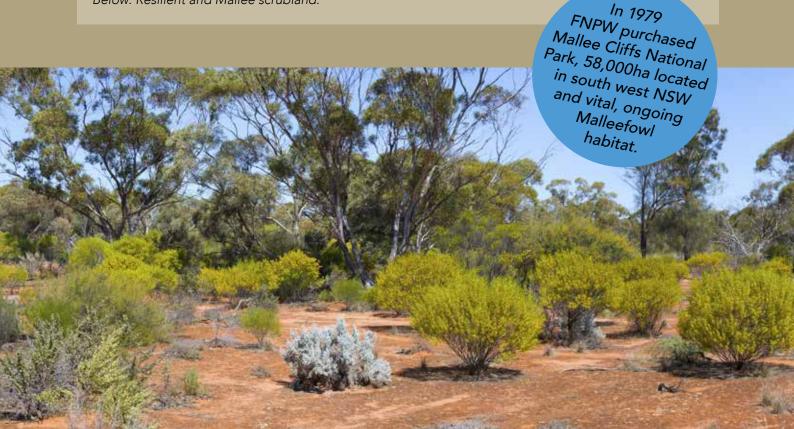
Website www.fnpw.org.au

Facebook FNPW.1970 Youtube fnpw1970

Post GPO Box 2666, Sydney NSW 2001

Phone 1800 898 626 Email fnpw@fnpw.org.au

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ow time flies! It seems no time at all since I was sitting down to write the introduction to the Summer edition of PAWS, and now it is Autumn. This year, we have set ourselves some tough challenges that will see FNPW embark upon longer-term projects, and partnerships aimed at increasing our impact on creating parks and saving species.

It does not take much research to realise the worsening situation faced by our native fauna and flora - the media is full of stories about these challenges. Regrettably, Australia has the worst mammalian extinction rate on the planet. Reality has dawned that even the iconic Koala, so important to our tourism industry, has a difficult future ahead with loss of habitat, disease and car strikes continuing to impact the population.

It seems only right that we should rise to this challenge and work harder to protect our unique wildlife for future generations. FNPW therefore, has a busy year ahead and plans to purchase more land for parks, and work closely with our conservation partners, to fund projects that will save threatened species, across Australia.

Until quite recently I used to live on the edge of the Adelaide Hills and sail my small boat on the Lower Murray River at Goolwa. In February, I returned to South Australia and met with various people that are going to help deliver some of these projects.

The Murray River Turtles were heading for extinction, but research funded by FNPW has identified a series of strategies that can potentially increase their numbers.

The Mount Lofty Ranges are home to a unique subspecies of the southern brown bandicoot (Isoodon obesulus) that is currently listed nationally as endangered. The creation of a "Bandicoot

Super-Highway" that will enable bandicoots to move safely between breeding populations is another fantastic initiative that FNPW will support, thanks to you.

FNPW is currently conducting a supporter survey, so that we can better understand your interests in FNPW's conservation work and keep you informed of the things that matter to you the most, with the least demand on your valuable time. If you have completed this survey - thank you! If you need another copy, or did not receive the questionnaire, please call our office on 1800 898 626 and we will send one to you. We value your views.

Our Corporate Volunteering Program continues to grow and we will shortly be adding more venues. This is a great way to come and join with other volunteers and Parks staff, while having a fun day out helping create parks and save species. It's a great way to contribute to the environment and community, while putting a big tick on your company's corporate responsibility program as you protect wilderness and wildlife for future generations.

Finally, I want to thank everyone who supported our summer Marine Debris appeal. The campaign was very successful and will enable us to fund clean-ups, research and source reduction plans

for marine debris. If you enjoy the oceans and waterways of Australia and this subject gives you concern, then please help by continuing to spread the message.

Far Jolyho.

Ian Darbyshire, CEO, Foundation for National Parks & Wildlife.



Sadly, many of the Mallee's native birds are under threat as they don't have the resilience of the Bull Mallee (aka Eucalyptus behriana) or the constitution of the legendary Mallee Bull.

## Mallee songbirds call for your help

iving in the arid Mallee regions is becoming tougher than ever before for many bird species, particularly those that don't fly far, are ground dwellers or who are living in small isolated groups.

In the last issue of PAWS (Summer 2017/18) we wrote about how FNPW has provided grant funding for the National Malleefowl Recovery Plan. Sadly, the Malleefowl is not the only feathered Mallee local in dire need of action to help it survive in this harsh environment.

In Australia, more than 80% of threatened birds are affected by a combination of habitat loss, fragmentation and/or degradation, with nearly half affected by inappropriate fire regimes. The Mallee's



semi-arid eucalypt woodlands are particularly fire-prone habitats which support an array of threatened bird populations which have been severely reduced by catastrophic wildfire.

Mallee birds have no special adaptations to cope with fire, they either perish or flee to unburnt areas.

Grazing of cattle on the Mallee is having a high impact on a number of species, and inappropriate water management and genetic introgression have high impacts on individual species. An overall threat rating of high to very high for six bird species has been identified and Recovery Action Plans are currently underway. These species are:

The *Mallee Emu-wren* – a tiny 4-6g and named after it's six wispy emu-like tail feathers. With their short rounded wings, and a long filamentous tail they are poor flyers and have adapted to scurrying through dense undergrowth of prickly spinifex grass, dense heaths and shrubs.

The **Western Whipbird** (eastern subspecies) – a stoutly built bird growing to about 25cm in length and 45g in weight. It has a long graduated tail, short rounded wings and a short triangular erectile crest. These shy and elusive birds dwell mainly on the ground in dense, low shrubbery and are usually only detected by their loud, unusual squeaking gate like call.

The **Red-lored Whistler** – a songbird which grows to 20cm in length and up to 37g in weight. It has a conspicuous whistle followed by an indrawn 'see-saw' breath like sound. Both genders have red eyes.

Emu-wren is named for its

The Mallee Emu-wren. Red-lored Whistler and Western Whipbird have all suffered substantial declines in range and abundance, with populations in scarce isolated groups.

The Black-eared Miner - a stockily built honeyeater, about 20cm long. Over 95% of all known colonies are located in one reserve which lost up to a third of its breeding habitat following two large wildfires.

The eastern Regent Parrot - a medium-sized, slender, long-tailed parrot from 37-42cm in length and 160-190g in weight. Despite its fast flying speed, Regent Parrots are reluctant to fly over open areas, particularly during breeding season.

And the *Malleefowl* – a large and distinctive ground-dwelling bird that grows up to 60cm in length and can weigh up to 2.5kg. Malleefowl dedicate 9-11 months per year to building and maintaining a large incubation mound. They rarely fly, instead prefer to walk slowly across the terrain.

Climate change is a long term significant threat. Increased catastrophic events such as drought or extensive wildfire alter and destroy essential bird habitat rendering it unable to sustain viable populations.

Mallee threatened species recovery activities, in conjunction with government agencies and environmental groups, include:

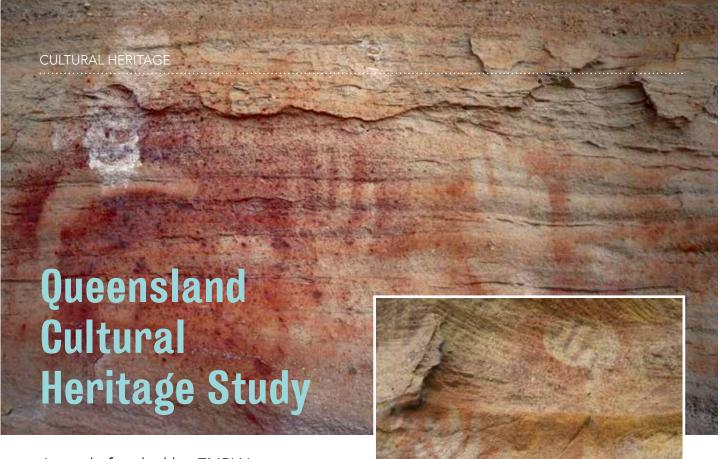
 Community engagement and education regarding threatened species conservation.

- Development of ecological burn strategies that instil appropriate fire regime so as to not burn all habitat and food sources within a region at one time, and to promote natural succession.
- Preparation of bushfire response plans that will improve response to mallee fires.
- Ex-situ captive breeding programs.
- Removal of artificial water access.
- Development of a translocation program for reintroducing sub-populations or reinforcement of known populations.
- Control of vertebrate pest populations goats, foxes, cats and rabbits, which either prey on, or compete against the bird species for resources.
- Reduction of stock intensity, or excluding grazing in some areas, to allow regeneration of vegetation for habitat, food sources or nest sites.
- Retention of under-storey shrubs, fallen logs, leaf litter and grasses for food and shelter.
- Harness existing revegetation projects and prevent clearing of habitat such as nesting sites and food sources.

With your support we can help protect, improve and conserve threatened Mallee birds and their habitat to increase their resilience and decrease their risk of extinction.

Opposite top: Southern Mallee Emu Wren Opposite bottom: Western Whipbird lay speckled blue eggs and are extremely rare and hard to spot.

					1	
High priority threats	Mallee Emu Wren	Black-eared Miner	Western Whipbird	Red-lored Whistler	Regent Parrot	Malleefowl
Catastrophic wildfire	Very High	Very High	Very High	High	High	Very High
Habitat loss and fragmentation	Very High	Very High	Very High	High		Very High
Drought	Very High	Very High	Very High	High	High	Very High
Inappropriate fire management	Very High	Very High	Very High	High	Medium	Very High
Grazing pressure	Medium	High	Medium	High	Low	Medium
Inappropriate water management					High	
Genetic introgression		High				
Ongoing vegetation clearance	Low	Low	Low	Low	Medium	Low
OVERALL THREAT RATING	Very High	Very High	Very High	High	High	High



A study funded by FNPW documented the findings of an investigation of significant cultural heritage sites, primarily those of Aboriginal significance, in several Queensland State forests.

ine State forests were included in the investigation: Barakula, Boxvale. Bringalily, Bulli, Gurulmundi, Presho, Shotover, Whetstone and Yelarbon.

The aim of the study was to identify State forests with "high" Indigenous cultural values that warrant further protection. The study objectives were to:

- Identify whether previously recorded sites survive, can be located, still retain their heritage values;
- Determine whether these sites are being adequately protected; and
- Ascertain whether additional sites can be identified through field surveys.

The review revealed that three of the nine Queensland state forests assessed have highly significant cultural heritage values. These are:

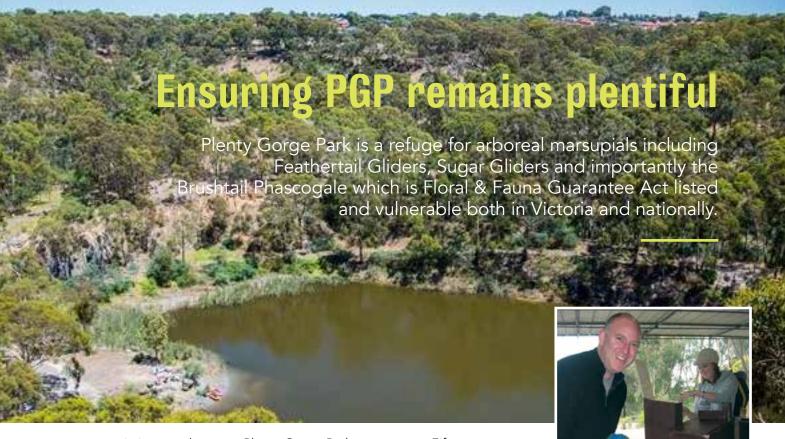
Boxvale State Forest, which has a small suite of Aboriginal sites. The one rock art site that was relocated appeared not to be affected by cattle scuffage or rubbing of the rock art.

Presho State Forest, which has a large suite of highly significant, predominantly rock art sites.

The proximity of Presho State Forest to other National Parks with high cultural and natural heritage values suggests transition to National Park status may be the most cost-effective means to protect the cultural and natural heritage values, as cattle rubbing against the rock art is the greatest threat to these sites.

Shotover State Forest, which has significant rock art sites including stencilled and painted art sites that are significant to the Gaangalu People, and where cattle grazing also poses a threat to the integrity of the sites.





xisting nest boxes at Plenty Gorge Park were in poor condition, and significant areas of vegetation lacked old growth eucalypts with hollows for nesting and breeding sites.

The key project objective was to enable these species to persist at PGP and to encourage breeding and juvenile dispersal into suitable habitat through a nest box program (construction, hanging and monitoring).

An additional goal was the replacement of existing nest boxes hung throughout the park in the 1980's, and found to be in poor condition, missing lids, fallen on the ground, etc.

Funded through donations from FNPW supporters, the nest box program has ensured the preservation of arboreal species including the Brush-tailed Phascogale, Sugar and Feathertail Gliders in an evolving regional setting.

Specific achievements include:

- Fifty new nest boxes built and hung in appropriate habitat.
- The replacement of old, broken or fallen nest boxes.
- Nesting and breeding sites secured for aboreal fauna in old and new locations into the future (projected nest box life-span is 15-20 years).
- Four park nest box surveys completed, data recorded and images captured.
- Evidence of marsupial occupancy detected (individuals, colonies and nesting materials) in new nest boxes at all sites.
- Ongoing environmental benefits in protecting biodiversity within PGP.









Frogs have very sensitive skin that is susceptible to chemicals and contaminated run off. To encourage them into your backyard, avoid using chemicals that could wash into the soil or waterways.

# Mistaken **Identity**

Up to two-thirds of suspected cane toads turn out to be harmless native frogs. Knowing the difference can help species such as the much misidentified Bumpy Rocket Frog.

ook out for the Bumpy Rocket Frog in the north of Australia, in Darwin backyards and particularly in northern Queensland. Aka the Floodplain Frog, it comes out in great numbers after heavy rains.

The Bumpy Rocket Frog has a very warty problem, which is how he got his name. It might look like a toad at first glance, but have a closer look because unlike toads, this frog has moist skin and a slender body with longer legs.

Australia does not have any native toads. However, unfortunately we do have the introduced and deadly Cane Toad.

The Cane Toad is much bigger than the 4cm long Bumpy Rocket Frog which is brown with a warty back and pale cream or yellow legs.

The male Bumpy Rocket frog is known for its loud and distinctive voice. The call is a high pitched 'beep beep' that they repeat all night to attract potential female partners.

Like a lot of frogs, the skin under their mouths can be inflated and deflated to produce these mating calls. It takes a lot of energy for a small frog to create these loud noises.

When the Bumpy Rocket Frog finds his mate, they will leave a clump of 90 to 330 eggs. These eggs need to be kept wet while the baby tadpoles are growing inside which usually takes about 76 days. Once they hatch, the tadpoles eat and grow straight away. Over time their legs will develop and eventually the tail drops.

Autumn is the time for many different frog species to start growing their legs, so see if you can find them in your local pond or creek.

#### How to identify a cane toad from a native frog

Before you decide to dispose of a creature you suspect is a Cane Toad, make sure you are not mistaking the identity of a native frog. Look for these cane toad identifiers:

- Large poison glands behind the ears.
- A pointed bony 'm'-shaped ridge over their middle of their nose.
- Visible eardrums.
- Warty skin (some native Australian frogs have this, so be careful here.)
- Dry, rough skin like sandpaper. Native frogs are generally moist and slippery.
- Webbed back feet
- A short, broad snout. Native frogs often have a longer, more pointed snout.
- A dull brownish colour.
- A large body about 10 to 15cm long.
- Cane toads cannot climb smooth surfaces.
- Cane toads do not have suckers on theend of its toes like some native frogs.
- Listen out for the males' guttural trill call.

To receive a regular email from Backyard Buddies go to: backyardbuddies.org.au

## Wombeyan Bioblitz connecting citizens with science

Hosted by the Kanangra to Wyangala (K2W) Partnership and supported by FNPW, the 3-day Wombeyan Bioblitz provided a unique opportunity to participate in wildlife surveys, looking at everything from orchids to birds, bats and insects.









¶ he idea of a Bioblitz is to connect people with science, and survey as much flora and fauna as possible within a set space and time.

The data collected improves the national biodiversity record and is used to help better-manage important areas of native plants and animals.

The results are still being collated, but already we know that seven bird species not previously recorded in the area have been identified, and 200 new invertebrate species which will become part of the Australian Museum collection.

The weekend was a great success and opened the door to a new generation of budding scientists by providing hands-on experiences undertaking fieldwork with eminent local ecologists.

Surveys ran from 6am to 11pm each day, and Saturday was the highlight of the program, with K2W partners creating a festival feel with information stalls, activities and presentations.

This project has been assisted by the NSW Government through its Environmental Trust Bush Connect Program.

Represented on the day were FNPW, Rocklilly Wombats, Australian Museum, NSW National Parks and Wildlife Service, National Parks Association and Taronga Zoo.

The presentations really encouraged empathy and understanding for our animals and the challenges they face in a changing landscape.

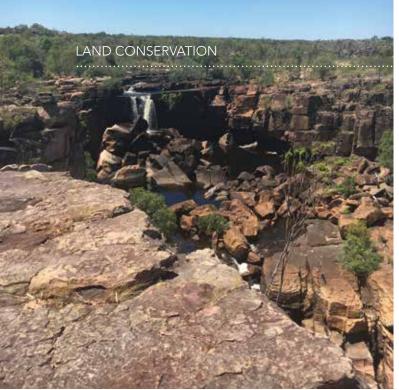
Another highlight was the Welcome to Country and yarning circle held by Gundungurra man, David King. David spoke of his mother, culture and connection to country to an eager audience.

The weekend was rounded-off with the discovery of a rarely-seen spotted-tailed quoll, captured on camera, and a Greater Glider, found sheltering in a nest box that had been installed by the Tambelin Independent School earlier in the year.

It's widely accepted that Great Gliders, with a tail measuring up to 60cm long, won't use next boxes. However, this one seemed very much at home.

"It just goes to show that any improvement, such as weed control, planting, feral animal control, or even next boxes, can contribute to improving wildlife habitat. These finds show the importance of updating our plant and animal records so that we know what's going on in the bush," said Mary Bonet, K2W Coordinator, who is already planning the next Bioblitz.

> Check out the K2W Bioblitz videos at: www.youtube.com/user/fnpw1970





# Stone Country fire management

Thanks to you, FNPW has helped fund a fire-management project in the stone country of Kakadu National Park, to reduce the risk of bushfires further destroying vulnerable White-throated Grass-

wren habitat

ildfires can be very beneficial to Australian landscapes, clearing weeds and breaking open seedpods of trees that only revegetate after fire. But fires can also have devastating effects on wildlife that cannot escape, and some populations can be severely depleted by bushfires.

The vulnerable White-throated Grasswren was once abundant in Kakadu National Park, but declining numbers due to feral animals and habitat loss has placed them on the Vulnerable Species list. It is a small ground-dwelling bird living in remote areas that can be difficult to spot, and there has been increasing concern for its survival in Kakadu.

Traditional owners from Binini tribe and Indigenous rangers carried out bush walking burning. This early targeted burning aims to prevent the very hot late season bushfires that have significantly damaged wildlife habitat over the last few years and will give native animals including the grasswren a chance to recover.

> to establish their current numbers and where best to direct fire management activities to protect them. The rocky and difficult terrain that is the preferred habitat of the grasswren presented a challenge to the survey group, which included bird experts, to identify the calls of the wrens who could not always be seen.

The project also included grasswren surveys

Traditional owners were involved in every aspect of the program, using their local knowledge to create a firebreak around stone country grasswren habitat, help carry out strategic controlled

burning to reduce the risk of wildfire, and search for grasswrens.

Eleven grasswrens were sighted, including two pairs in a location previously unknown for sightings.

The engagement of the local community and success of the project have led to future bushwalks being scheduled, to continue monitoring the fire risk and assess ongoing grasswren numbers.

The project has had wider benefits, protecting many fragile flora species and native animals that live alongside the grasswrens and are equally impacted by uncontrolled wildfires.

### FNPW needs your urgent help to continue our vital work. Please donate today.

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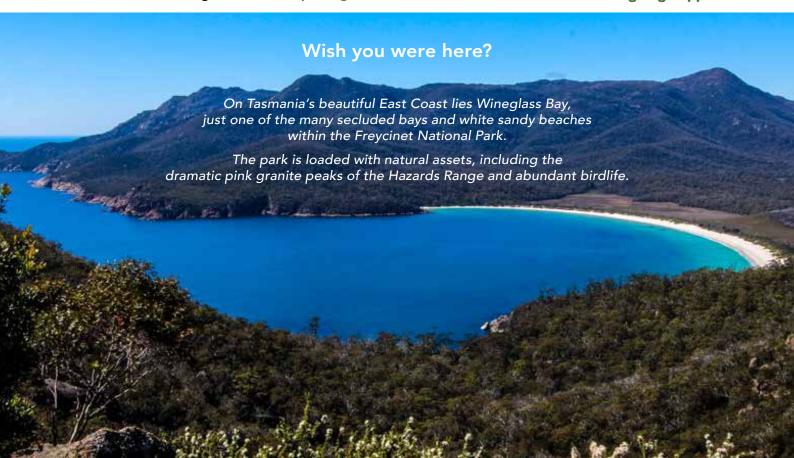
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  3. FNPW will send you a receipt within 30 days of the end of the financial year summarising your entire year's gifts for tax purposes.
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Thank you for your donation and ongoing support.





**Creating parks, saving species** 

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