

# Wildlife Queensland Bayside Branch



# Newsletter October 2014

## The Month Ahead.....

Next Meeting.

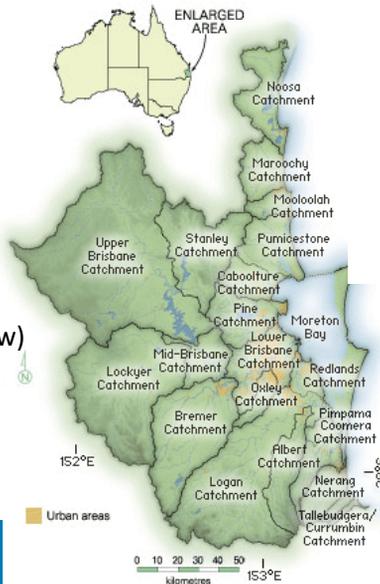
**Friday 31st October 2014 7.30 pm**

**James Udy** *Chief Scientist Healthy Waterways*

Come listen to Healthy Waterways chief scientist James Udy give a summary of this years South East Queensland ecosystem report card results.

Official results will be available online (link below) from the 22<sup>nd</sup> of October.

<http://www.healthywaterways.org/EcosystemHealthMonitoringProgram/Home.aspx>



## REMINDER: Glossy Black Cockatoo Birding Walk at Leslie Harrison Dam

**Sunday 19th October 8.00 am**

Where: Meet car park J.C.Trotter Park Cherbon Street Burbank  
Walk down to and along the foreshore of the now depleted Leslie Harrison Dam.  
Bring reasonable footwear, hat, sunscreen and water 1.5 hour amble.

Cost \$2.00 Morning tea provided

Register contact Steve 0423 036 676 or [bhomewoo@bigpond.net.au](mailto:bhomewoo@bigpond.net.au)

For more information on the survey visit [www.glossyblack.org.au](http://www.glossyblack.org.au)

## Batty Boat Cruise

**Sunday 2 & 23 November, late afternoon (time varies)**

Cruise the city centre on the Brisbane River with Wildlife Queensland. Watch the bats fly over and enjoy expert commentary. Come in costume to the Halloween cruise (2 November) - best dressed wins a prize!

Brisbane River

Book now to get on board! Call Head Office on 3221 0194.

## GOING DIGIT@L

Have you considered receiving your newsletter by email?

If you would like to see the full colour version of the newsletter each month, please let us know by emailing [wildlifebb@bigpond.com](mailto:wildlifebb@bigpond.com)

It will save paper, envelopes and postage.

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# From the Executive Team...

## Presidents Report

Spring has got to be the best season of the year, although with climate change some of the seasons seem less defined, this winter being a case in point. The dawn chorus is at its best and the mornings are crystal clear. We have just spent some time in the Blue Mountains, frosty mornings but the views were spectacular and the blue haze very apparent, still very dry everywhere rivers and waterfalls were barely running. Tourism has always been vital to this region; pressure on the area and its walking tracks is enormous but investment in keeping facilities upgraded and restricted road access has maintained the environment to some extent.

The branch has been very busy at various displays over the last couple of months, I must thank all our volunteers who have helped and also Indigiscapes staff for organising such events which help get the environmental messages out to the community. These are vital in our quest to protect the environmental values not only of our region but to instil these attitudes into our elected representatives.

On the 19th October the branch has organised a walk to Leslie Harrison dam, to see what has happened to the foreshore now so much water has been drained and participate in a local survey for Black Cockatoos, full details within the Newsletter.

*Every time I have some moment on a seashore, or in the mountains, or sometimes in a quiet forest, I think this is why the environment has to be preserved.*

- Bill Bradley



Backyard Visitor at Alex Hills



The Three Sisters at Katoomba



## Bayside Branch Out and About

Wonderful Wildlife event at Indigi on Friday 26 September, Bayside was one of the groups invited to set up displays.

Bayside set up a display and distributed educational material to the hundreds of children who attended the event.

(Right) Photograph of Gwynne taken by Doreen.



# Voice of the platypus finally heard

September 2014

WPSQ Website

After years of campaigning by Wildlife Queensland to have opera house traps banned, a government has finally listened and has action in hand to reduce ongoing threats to platypus.

Wildlife Queensland welcomes the advice received from Primary Industries Minister John McVeigh that there will be changes to the way in which freshwater traps, including opera house traps, are able to be used from 1 February 2015.

"This is certainly a step in the right direction," said Des Boyland, spokesperson for Wildlife Queensland.

"Funnel traps, round traps and opera house traps, the killers of many platypus over the years, with openings larger than 5cm will be banned in any waterway east of the Great Divide and the Gore Highway. The permitted size of the opening will restrict platypus access," he said.

Wildlife Queensland commends the action taken by Minister McVeigh. It is not often that Wildlife Queensland has the opportunity to praise the Newman Government but this is one such occasion.

Furthermore, not to detract from this great news, this Minister's approach and actions with regard to biosecurity also warrant applause.

Of course, all this hard work for the platypus will be futile if a strong enforcement and compliance program is not implemented. The time delay in affording platypus protection should enable the Government to instigate a sound educational program to make people aware of their new responsibilities.

One of the major challenges is defining the occurrence and the natural habitat range for the platypus - the western limits are certainly unknown. Within available resources Wildlife Queensland is addressing this challenge with its PlatypusWatch program. This community based program supported in part by several SEQ local authorities, aims to document where platypus occur. This information helps drive conservation actions now and in the future to protect this extraordinary animal.

Following discussions, Wildlife Queensland has every confidence that, if it is demonstrated that platypus are at risk outside of the yet to be legislated restricted area, this government will again listen and act to rectify the situation.

Wildlife Queensland acknowledges the support for this campaign received from members, the public and the media which undoubtedly assisted in achieving this desirable outcome.

"Wildlife Queensland also acknowledges that its concerns for our wildlife were shared by the Department of Environment and Heritage Protection," concluded Boyland.



Platypus in creek - Photo © Lee Curtis



Download the Aussie Backyard Bird Count app from the iTunes App store or the Google Play store or click on the 'Submit a Checklist' button at the top of the page.



Select the location of your count. If you are using a mobile device with an inbuilt GPS, the app will detect your location



Start your count. You can count anywhere! We would prefer each count to be done for 20 minutes. If you are unable to spare 20 minutes, do what you can, we'd still love you to be involved!



Submit your checklist. Instantly see live statistics on how many people are taking part, and the number of birds and species seen near you and right across Australia

<http://aussiebirdcount.org.au/>

# World failing to meet biodiversity

## targets: study

3 October 2014

James Whitmore and Nadia Wu

Globally, biodiversity is in trouble, and new research shows that the situation is unlikely to improve over the next five years.

Researchers from around the world analysed global progress towards meeting the 20 international “Aichi Biodiversity Targets” by 2020 as set under the Convention on Biological Diversity in 2010. The results were published today in *Science*.

The mid-decade analysis found that while knowledge of the biodiversity crisis had greatly improved, more action is needed to reduce pressure on biodiversity and preserve ecosystems.

168 countries are party to the convention, including Australia.

Most of the Aichi targets lack quantitative measures, so the researchers had to find 55 other indicators that could show how the world is progressing.

One of the indicators used is the World Wildlife Fund Living Planet Index, which monitors more than 10,000 populations of mammals, birds, reptiles, amphibians and fish. The 2014 Living Planet Report, released this week, showed that these populations have declined by more than half since 1970.

To find out how biodiversity will be fairing in 2020, the researchers used projections. The findings suggest that while there will be continuing improvement in knowledge and funding, on current trends the state of biodiversity, threats and ecosystem services will all worsen by 2020.

Targets to combat pollution, invasive species, habitat loss and climate change will likely miss their mark, although a target to protect 17% of land area will likely be met.

Professor Melodie McGeoch, ecologist at Monash University, said that while the projections are grim, they don't have to be.

“Unlike climate change projections, we are not committed to these trajectory estimates. They can be turned around, or at least slowed down.

“One of the most important reasons for having these targets is to leverage action and investment to achieving them. There are some signs that this is happening, but clearly not enough and not enough fast enough.”

People are becoming more aware of the world's biodiversity, but the crisis continues. Chris Ford/Flickr, CC BY-NC Globally, biodiversity is in trouble, and new research shows that the situation is unlikely to improve over the next five years.

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### **Biodiversity measures ‘far from adequate’**

Professor McGeoch also said the indicators used for biodiversity are “far from adequate” in, for example, invasive species.

“There is no doubt that the invasive species problem continues to worsen (more species are becoming invasive and more places are being invaded). What we can't say with much confidence is the rate at which this is happening.”

But progress is being made to address data deficiencies, such as the Global Invasive Species Information Partnership.

Dr Emily Nicholson, conservation researcher at University of Melbourne, said few measurements of biodiversity have been tested.

In related research, also published today in *Science*, Nicholson found that indicators such as the Living Planet Index are “robust”, but depend on the quality of data.

For example, Nicholson highlighted that birds — favoured by amateur and professional naturalists alike — often make up a large part of ecological data.

“There is a lot of data on bird populations. This is especially pronounced within marine ecosystems where bird data can make up more than half of the data... This means that the trends shown in the index in those systems will be heavily influenced by what is happening to seabirds.”

She said modelling was one way to improve biodiversity measurements, which had been used successfully in

fisheries

# Toxoplasmosis: how feral cats kill wildlife without lifting a paw

6 October 2014

Bronwyn Fancourt

Feral cats are a huge threat to our native wildlife, hunting and killing an estimated 75 million animals across Australia each and every night. But the killing spree doesn't end there. There's a parasite lurking in kitty's litter that continues to kill wildlife long after the perpetrator has left the scene of the crime.

The killer is toxoplasmosis, a disease caused by the parasite *Toxoplasma gondii*. The parasite is spread by cats but it can infect any bird or mammal. Around one-third of humans worldwide are infected with the parasite. But the deadly effects on our wildlife are often overlooked.

## What does toxoplasmosis do?

In many animals, *Toxoplasma* infection causes nothing more than a mild case of the sniffles. If the animal is healthy, the immune system usually produces antibodies that keep the parasite under control. The parasite then goes into a relatively dormant state, forming invisibly tiny cysts mainly in the heart, lungs, brain, eyes, and spinal cord. While the cysts stay with the animal for life, they rarely cause any direct harm.

But for some animals, infection can be deadly. If an animal's immune system isn't quite up to the task, either through illness or stress, the initial infection can lead to toxoplasmosis. The disease has a range of debilitating symptoms, including anorexia, lethargy, reduced coordination, apparent blindness, enlarged lymph nodes, disorientation, breathing difficulties, jaundice, fever, abortion, and death.

Some of these side-effects may kill the host directly, while for others, they will make the host an easier target for predators. For example, blinded wildlife cannot see predators, while lethargic or badly coordinated animals might be too slow to escape.

## Another threat to our wildlife

Unfortunately, Australian marsupials are very susceptible to toxoplasmosis. Species such as the eastern barred bandicoot typically die within 2-3 weeks of infection. As a result, toxoplasmosis has thwarted conservation attempts to introduce the species to French Island in Victoria.

But bandicoots are not the only victims. Toxoplasmosis is a confirmed killer of other Australian wildlife, including Tammar wallabies, koalas, wombats, and several small dasyurids.

In Tasmania, toxoplasmosis kills Bennett's wallabies and pademelons, with infected animals found dead or stumbling around blindly during the day, vulnerable to predators or cars as they stumble onto busy roads.

## A manipulative parasite with a motive

For animals lucky enough to survive the initial infection and its symptoms, the threat doesn't end there. While the parasite might appear to be dormant, it may be secretly manipulating its host's behaviour.

Several studies have linked certain "risky behaviours" with latent *Toxoplasma* infection. For example, studies have

shown that rats and mice infected with *Toxoplasma* not only lose their natural fear of cats, but are actually attracted to them.

Why? It all comes down to motive.

The *Toxoplasma* parasite needs to pass through two different animal hosts to complete its life cycle. Some stages of the life cycle can occur in any warm-blooded animal (the intermediate host), but the sexual stages can only occur in a cat (the definitive host).

So when the parasite is in an intermediate host such as a mouse or a rat, it needs to pass back into a cat to complete its life cycle. To achieve this, the parasite manipulates the rodent's behaviour, making it an easier meal for a cat.

But in wildlife, these risky behaviours will increase the risk of predation – not just by cats, but all predators including foxes, dogs, raptors, and reptiles.

And in a strange evolutionary twist, mothers infected with *Toxoplasma* have been found to give birth to more sons in both mice and humans. While the reasons for this are unclear, infection with *Toxoplasma* may gradually skew the sex ratios of our threatened wildlife in favour of males.

Over time, this would reduce the number of females in a population, further reducing the reproductive capacity of many declining species and exacerbating ongoing population declines.

## Why are feral cats to blame?

Newly infected cats only shed the parasite for around two weeks. However, in that short time, a single cat can shed more than 20 million parasites in their faeces. Thousands of mammals and birds can then become infected by eating food, soil or water contaminated by a single cat. Under cool, humid conditions, these parasites can survive in the environment for at least 18 months, continuing to kill wildlife long after the cat has left the area.

While the parasite can also be transmitted by eating infected prey, studies have shown that marsupials in areas where cats may roam were 14 times more likely to be infected than those in areas without cats. Most responsible pet owners keep their domestic cats indoors and restrict their hunting activities, minimising the risk of infection. But feral cats need to hunt and kill to survive.

Therefore, feral cats are the most important player in the *Toxoplasma* cycle. To break the cycle and eliminate the parasite, we need to eliminate feral cats.

A recent study found that 84% of feral and stray cats tested in Tasmania were infected with the parasite.

Previous studies have found a similarly high prevalence in feral cats on both Christmas Island and Kangaroo Island. These islands are currently refuges for a range of endemic and threatened species, many that have been driven to extinction on the Australian mainland. While Christmas Island has recently been earmarked for feral cat eradication, all three island refuges should be prioritised for targeted feral cat control programs.

Toxoplasmosis is yet another threat posed by feral cats against wildlife. The future of many of Australia's threatened species increasingly hinges on our ability to control feral cats.

## Resources

- Page 3: <http://www.wildlife.org.au/news/2014/voiceofplatypus.html>  
Page 4: <http://theconversation.com/world-failing-to-meet-biodiversity-targets-study-32432>  
Page 5: <http://theconversation.com/toxoplasmosis-how-feral-cats-kill-wildlife-without-lifting-a-paw-32228>  
Page 2: Photo. Three Sisters & King Parrot S Homewood 2014 and Bayside Branch Stall D Payne 2014  
Page 3: Photo. Platypus L Curtis date unknown  
Page 4: Photo. Xanthorea sp. A Baltais 2013  
Page 5: Photo. Underwater A Baltais 2014

## Committee & Contacts

<b>President</b>	Steve Homewood	3824 0522
<b>V President</b>	Vacant	
<b>Secretary</b>	Simon Baltais	3822 4943
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<b>Executive</b>	Don Baxter Doreen Payne	
<b>Bayside Newsletter Editor</b>	Alix Baltais/Simon Baltais	
<b>Wildlife Diary Editor</b>	Simon Baltais	

Email: [bayside@wildlife.org.au](mailto:bayside@wildlife.org.au)

Web: <http://www.branches.wildlife.org.au/bayside>

## Keep Up to Date Online!

### Blogs:

#### SeagrassWatch

<http://seagrassmb.wordpress.com/>

#### Wildlife Bayside

<https://wildlifebayside.wordpress.com/>

#### Curlew Watch

<https://curlewwatch.wordpress.com/>

### Websites:

#### Wildlife Bayside

<http://branches.wildlife.org.au/bayside/>

#### MangroveWatch

<http://mgwmb.azurewebsites.net/>

#### SeagrassWatch

<http://sgwmb.azurewebsites.net/>

#### Ornate Rainbowfish

<http://rainbowfish.azurewebsites.net/>

## Membership Application

### Wildlife Preservation Society of Queensland

#### Memberships Types

- \$30.00 Single
- Concession (Pensioner/Full Student)
- \$45.00 Family or Non Profit Group
- \$12.50 Junior

#### Optional Wildlife Magazine Subscription

- \$47.00 per year inc GST (Four Issues)
- \$90 for 2 years inc GST (Eight Issues)
- \$70.00 per year (International Post)
- \$135 for 2 years (International Post)

Optional Donation \$ \_\_\_\_\_

For Campaign \_\_\_\_\_

(Bayside does not tax deductible status)

Postal address: PO Box 427, Capalaba 4157

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Address \_\_\_\_\_

\_\_\_\_\_ P/C \_\_\_\_\_

Phone No \_\_\_\_\_

Email \_\_\_\_\_

Special Interests \_\_\_\_\_

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#### Pay by Credit Card

Card Type:  VISA  Mastercard

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Exp Date \_\_\_\_/\_\_\_\_

Name on Card \_\_\_\_\_

Signature \_\_\_\_\_