

# Platypus News & Views



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*Newsletter of the Australian Platypus Conservancy (Issue 71 – February 2018)*

## AN ATLAS FOR PLATYPUS

Say that you've just spotted a platypus swimming in your local creek. What's the best way to report this information to ensure that it contributes to ongoing conservation efforts?

In 1994, the Australian Platypus Conservancy started systematically recording platypus sightings reported by members of the public. From the outset, we recognised that even the best-intentioned person can sometimes make mistakes when reporting platypus sightings, particularly if the person is unfamiliar with the appearance and behaviour of the animal that is most likely to be confused with a platypus, namely the water-rat or rakali (see *PN&V* no. 54).

Accordingly, sighting reports recorded by the Conservancy are vetted before being accepted, particularly if they were obtained in a place where platypus are believed to be rare or otherwise unlikely to be seen.

This normally entails a Conservancy biologist speaking directly to the person who made the sighting to ascertain if this was the first time that the person had seen a platypus in the wild, from what distance and for how long the animal was observed, and how the animal behaved. In cases where there are reasonable grounds for suspecting that the sighting may have been of a different species, the sighting is recorded but not included in the main sightings database. Though somewhat time consuming, the outcome is that the main APC sightings database, which holds around 94% of all sightings reported to us, now contains many thousands of quite reliable locality reports for this species.

To enable this information to be used more widely, the Conservancy is currently assigning latitude and longitude to all of the reliable first-hand reports held in our main platypus (and rakali) sightings databases, with a view to lodging the records with the Atlas of Living Australia in coming months. More generally, we believe that the ALA should ideally be the end-point repository for all such sightings, given that it's a well-funded national program that's meant to serve as a central source of information about the distribution and status of Australian animals (as well as plants, fungi, etc.).

The APC sightings records will be submitted using the ALA's BioCollect facility, which will enable us to document how records were obtained and what procedures were followed to assess and safeguard their reliability.

Although persons who happen to spot a platypus can certainly choose to report the details directly to the ALA, we feel that there is much to be gained by reporting the details via an organisation, like the APC, that is well-placed to double-check and vouch for the accuracy of sightings before they are made available for wider use by natural resource managers, other persons interested in the environment or in scientific studies.

By the same token, we urge all groups that are actively involved in soliciting and recording details of platypus sightings – for example, via regional initiatives designed to engage the community in recording wildlife observations, or the platypusSPOT website and app - to both make it their habit to check the veracity of individual sightings with care and to share all records deemed to be reliable with the Atlas of Living Australia.

## **FEMALE PLATYPUS DELIVERS KNOCK-OUT BLOW**

Who would win in a fight between a platypus and an Australian water-rat (aka rakali)? Some remarkable photographs taken by Ann Killeen suggest that the answer is not necessarily as simple or straightforward as one might think.

A platypus is typically larger than a water-rat, though adult weight ranges overlap – a large male water-rat weighs about the same as a medium-sized female platypus. However, the platypus bill is equipped only with rough grinding pads to help process food items while the water-rat has a formidable set of large and very sharp teeth. Whereas the platypus diet is dominated by aquatic insects, water-rats are known to take prey up to the size of ducks and have even been observed attacking a swan.

Based on the rakali's reputation as a fierce and determined hunter, famed naturalist David Fleay wrote in 1948: "I have a pretty firm impression, though no actual proof, that Water Rats account for the odd baby Platypus." An adult male platypus is equipped with sharp venomous spurs on his hind ankles that certainly could be used to good advantage in an aggressive encounter with a water-rat. However, one might confidently predict that a spur-less female platypus is much less likely to be victorious in such a situation.

In October 2017, Ann witnessed an amazing encounter near Wahgunyah in northern Victoria, when her attention was drawn to a platypus and a water-rat swimming in close proximity to each other. The two were first observed just outside the entrance to a burrow that, based on her previous observations, appeared to house both species on different occasions as a shelter.

The water-rat initially seemed to be pursuing the platypus, which was doing its best to escape. However, as the animals continued to progress through the water, sometimes grappling with each other, the platypus eventually appeared to grasp the water-rat's body firmly between its hind legs and hold it underwater. Within a few minutes the water-rat was limp, presumably having drowned (see photo at right). The platypus was then observed to swim off, still gripping the water-rat between its legs.



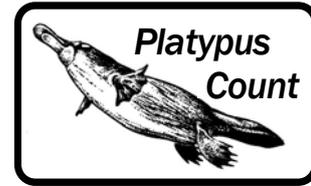
When Ann first described these events to us, our initial thought was that the platypus was an adult male that had used its venomous spurs to help overcome its opponent.

However, after inspecting some other photos taken by Ann in the same area that show a pair of platypus engaged in courtship, it became apparent that the victorious platypus (identified by a distinctive triangular notch in its bill shield, as can be seen above) was actually an adult female that would not have been armed with spurs.

To see more of Ann's wonderful photos of platypus we recommend that you visit her Facebook page:

[https://www.facebook.com/ann.killeen.9/media\\_set?set=a.1490507664340029.1073741867.100001424288819&type=3&pnref=story&hc\\_location=ufi](https://www.facebook.com/ann.killeen.9/media_set?set=a.1490507664340029.1073741867.100001424288819&type=3&pnref=story&hc_location=ufi)

## PLATYPUS COUNT UPDATE: LAKE BENALLA



As some of you may recall, we ran an article in November 2016 about the *Platypus Count* program at Lake Benalla in north central Victoria (PN&V no. 66). The program began in early 2012, partly in response to local concern about how well platypus would fare after Lake Benalla was drained to help eradicate a highly invasive aquatic weed, *Cabomba caroliniana*. In brief, although platypus ceased to be observed in and immediately upstream of the lake when it was drained, animals reappeared shortly after the lake refilled in late autumn and activity appeared to be back to normal by the subsequent breeding season (in late winter and spring).

Patches of *Cabomba* recently began to reappear in Lake Benalla, requiring the Goulburn Broken Catchment Management Authority to allow some parts of the lake bed to dry out in early 2018 to eliminate the weed. The new infestations were growing in relatively shallow water, so the lake level didn't have to be dropped as far as in 2012. However, to ensure that enough hot weather occurred to kill all of the *Cabomba*, it was considered prudent to start draining the lake by the end of January.

Late January is not the ideal time of year to draw down a Victorian lake system known to support platypus – juveniles typically first emerge from their natal burrow towards the end of January or in early February, and undoubtedly continue to suckle for a few weeks after that while they learn to swim and find their own food. Analysis of the large *Platypus Count* data set for Lake Benalla and its inflowing tributaries revealed two areas of concentrated and consistent platypus activity respectively located along Holland Creek and the Broken River. In each case the favoured stretch of habitat was located not far upstream of the lake and comprised about 300-400 metres of channel.

The results of recent visual surveys carried out by APC staff on behalf of the Goulburn Broken CMA after the lake's level was reduced as much as needed (in mid-February) revealed that each of these two areas appeared to support an adult female platypus and at least one associated juvenile. In both cases, the animals were using sites where sizable pools remained (see below). Although the extent of platypus foraging habitat had undoubtedly contracted as undercut banks and submerged logs were exposed above the water, the animals appeared to be feeding normally, both with respect to dive duration and how far they moved between dives, suggesting that they were finding adequate prey. No evidence of platypus activity was detected in other affected parts of the channels, perhaps reflecting the fact that males and non-breeding females are more likely (as compared to females with young) to shift their activity elsewhere in response to unexpected habitat change.

Happily, *Platypus Count* volunteers will be on hand to continue monitoring the Lake Benalla platypus population both while the lake is low and after it refills.



## **SIGHTING SPARKS NEW HOPE FOR WIMMERA PLATYPUS**

Platypus were once widespread in the Wimmera River catchment of western Victoria but their numbers declined progressively as habitat degradation, prolonged water-extraction and other factors - such as illegal use of fishing nets and traps - took their toll. Although the Mackenzie River sub-catchment continues to support a small platypus population, there has been little recent evidence that the species still occupies the Wimmera River itself.

When the APC received an online report in January of a platypus seen in the Wimmera River at Dimboola, we were therefore both interested and initially sceptical. As noted on page 1, a platypus can be confused with other species and so a follow-up discussion was considered necessary to establish whether the sighting was likely to be reliable. This in fact appeared to be the case: the person providing the report was fishing on the river bank when a platypus appeared on the surface about two metres away from him. Although it was starting to get dark he was able to see the animal clearly and identify it confidently as a platypus. He was also very familiar with the appearance and behaviour of water-rats, and was certain that the animal he saw was not a rakali.

The occurrence of a platypus sighting near Dimboola is actually quite plausible. In 2007 the APC conducted a platypus habitat assessment study on behalf of the Wimmera Catchment Management Authority that concluded that the stretch of river in and upstream of Dimboola was one of the places in the Wimmera system where platypus were most likely to survive through the long dry years of the Millennium Drought.

You can assist platypus conservation efforts by reporting platypus sightings via the APC website ([www.platypus.asn.au](http://www.platypus.asn.au)), or by emailing the details of when and where you saw a platypus to us at [platypus.apc@westnet.com.au](mailto:platypus.apc@westnet.com.au). Reports of recent water-rat sightings are also enthusiastically received.

## **PUBLIC TALK ON PLATYPUS**

The APC will be presenting a free talk about platypus on Tuesday 27 March 2018 at Echuca, as part of an informative session hosted by the North Central CMA about the Campaspe River and its Aboriginal cultural heritage. For details of time, venue and booking arrangements go to: [www.eventbrite.com.au/e/cultural-heritage-platypus-information-session-tickets-41690497400](http://www.eventbrite.com.au/e/cultural-heritage-platypus-information-session-tickets-41690497400)

## **HELPING US TO HELP THE PLATYPUS**

Many of the Conservancy's projects are funded by grants from management agencies, philanthropic trusts or corporate sponsors. Donations from individuals and environmental groups also contribute enormously to the APC's work, by supporting platypus population monitoring, public education programs and studies that can't otherwise be readily funded. If you would like to help out, remember that donations and bequests to the Australian Platypus Conservancy are tax-deductible.

Australian Platypus Conservancy



**PO Box 22, Wiseleigh VIC 3885**

**(03) 5157 5568 [platypus.apc@westnet.com.au](mailto:platypus.apc@westnet.com.au)**

**[www.platypus.asn.au](http://www.platypus.asn.au)**

**Facebook: Australian Platypus Conservancy (Official)**