

Platypus News & Views



Newsletter of the Australian Platypus Conservancy (Issue 51 - Feb 2013)

WELCOME TO OUR NEW NEWSLETTER

Welcome to *Platypus News & Views*. As the direct descendant and heir of the APC's original newsletter *Ripples*, *PNV* aims to keep its readers informed about interesting developments in platypus research and conservation, including findings from our community-based *Platypus Count* monitoring program. *PNV* is also designed to complement the "Australian Platypus Conservancy (Official)" Facebook page, on which several news updates are posted each week.

PNV will be produced quarterly and primarily distributed electronically as a PDF document. Hence you'll notice that there's been a switch to a display-friendly single-column layout with greater emphasis on colour images. However, low-cost black and white paper copies will continue to be provided to *Platypus Count* volunteers and *Friends of the Platypus* who prefer that format.

DEATH COMES IN MANY (AVOIDABLE) WAYS

Over the years the APC has done its best to draw attention to human activities which contribute to unnecessary platypus deaths in the wild. Some recent mortality reports have once again highlighted key problems.

A dead adult male platypus was discovered this January in an illegal cray trap set in the Yarra River at Don Valley (see photo). The animal apparently drowned after making a desperate effort to force its way out of the net. Shortly after, an opera house-type yabby trap set illegally in the LaTrobe River at Noojee was found to have claimed yet another platypus victim. On a positive note, the Conservancy continues to lobby for phasing out use of opera house traps in all states and territories and is currently working in partnership with the Taronga Conservation Society, Healesville Sanctuary and Dr Tom Grant from the University of NSW to test whether other yabby trap designs may provide a safe alternative to these death traps.



The discovery of a dead platypus floating in the Queanbeyan River at Karabar which drowned after becoming entangled in discarded fishing line highlights another widespread problem – the threat posed by angling-related litter. While most recreational anglers behave responsibly, a minority continue to leave behind lengths of line, abandoned lures and other rubbish which can be lethal to platypus and other wildlife.

A juvenile female platypus found dead on a footpath next to the Yarra River in February is believed to have died as the result of a dog attack, based on an autopsy by Dr Ted Donelan of West Doncaster Vet Centre. This incident is a reminder that naive juveniles emerging from nursery burrows in summer are an easy target for predators, including well-fed and otherwise friendly dogs. Accordingly, owners who exercise their dogs near water bodies should do the right thing and ensure that pets remain firmly under control (and are not allowed to stray unsupervised next to the water) at all times.

MOVING ON

The development of miniature wildlife radio-tags in the 1960s revolutionised the study of animal movements. Unfortunately, the platypus's stream-lined shape and the fact that it drowns if held underwater for more than 2-3 minutes means that it's not appropriate to use a collar or harness (which can potentially snag on submerged objects) to attach radio-tags to this species. Instead, platypus radio-tracking studies have mainly been carried out by gluing tags to a small patch of fur on the rump, allowing an animal to be monitored for just a few days or weeks before the tag is scratched off as the animal grooms itself.

To shed additional light on platypus ranging patterns, APC biologists recently analysed live-trapping records gathered over a 13-year span near Melbourne and 8 years in the Wimmera region in western Victoria, to reveal how far marked animals move between captures and over longer periods of time.



The strongest generalisation to emerge is that females are generally much less mobile than males. For example, adult females travelled on average only 35% as far between consecutive captures as males near Melbourne, and 29% as far in the Wimmera. The single longest movement by an adult female was a little less than 10 kilometres, as compared to nearly 26 km in the case of an adult male. Over longer periods of time (based on six or more captures), female home ranges typically encompassed 3-4 kilometres of stream or river channel, whereas male home range typically encompassed 8-9 (though up to 14) kilometres of channel.

Some of this difference can be explained by the fact that adult males weigh around 50-60% more than their female counterparts, and so (apart from the period when females are lactating) need to find more food to stay fit and healthy.

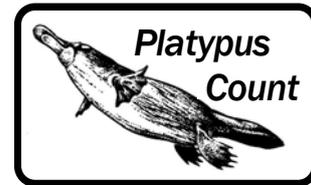
In addition, the fact that each adult male range normally overlaps two or more ranges belonging to mature females fits with the hypothesis that the platypus breeding system involves each male attempting to mate with as many receptive females as possible over a period of several weeks. Maintaining as large a home range as possible presumably makes it easier for a male to keep tabs on the reproductive status of adult females living in his neighbourhood and impress them with the keenness of his courtship.

From a purely practical point of view, the fact that each adult range commonly encompasses several kilometres of channel suggests that the most appropriate scale for planning and implementing platypus conservation measures is likely to extend beyond a single stream system and may quite conceivably extend to an entire river catchment.

By the same token, point sources of increased mortality risk to the species - such as vertical barriers that hinder movement along a channel, unguarded inlets to irrigation pumps, or regular use of nets and traps for fish or crayfish - can potentially have devastating effects on platypus population density for many kilometres upstream and downstream.

PLATYPUS COUNT UPDATE: TIDBINBILLA

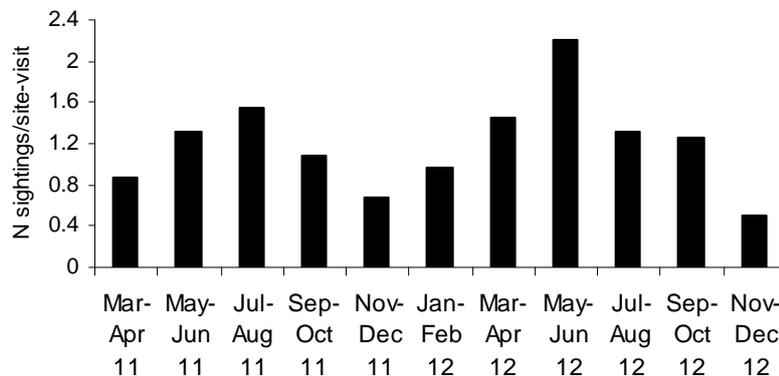
Tidbinbilla Nature Reserve, located southwest of Canberra, contains several pools and ponds in or near the Tidbinbilla River where platypus are often spotted. Volunteer guides based at the Reserve have been monitoring platypus sightings regularly at three of these sites since early 2011.



As shown below, platypus were generally seen more often at the Tidbinbilla River weir from March to December 2012 as compared to the same period in 2011 – the frequency of sightings increased by 22% on average. Similarly, sightings at Black Flats Dam rose by a factor of 30%, and those at Pond 4 by a factor of 14% between the same two periods. Assuming that the Tidbinbilla platypus population is mainly made up of mature adults and that these include 50% males and 50% females, it is possible (though of course not proven) that the increase in sightings was due solely to increasing population size, as long as about half of adult females successfully weaned one offspring in early 2012 which was then recruited into the population.

The frequency of platypus sightings at Tidbinbilla also varied seasonally in both years, reaching its peak in winter when more than one animal was typically observed swimming at the weir in each 10-minute monitoring period. Platypus sightings were roughly three times more frequent in winter as compared to the least productive months for sightings. In turn, this is about the same amount of seasonal variation in sightings that characterises both the Yarra River near Melbourne and the Queanbeyan River to the east of Canberra.

Tidbinbilla River at Weir



POLYGLOT PLATYPUS

Okay, let's say you're travelling overseas and someone asks you the name of your favourite animal. Presuming that the answer is "platypus", you might respond as follows:

Germany: **schnabeltier** ("beaked animal")

France: **ornithorynque** (similar to the species' scientific name, *Ornithorhynchus*, meaning "bird nose")

Italy: **ornitorinco**

Spain: **ornitorrinco**

Portugal: **plátipo**

Sweden: **näbbdjur** ("beaked animal")

Finland: **vesinokkaeläin**

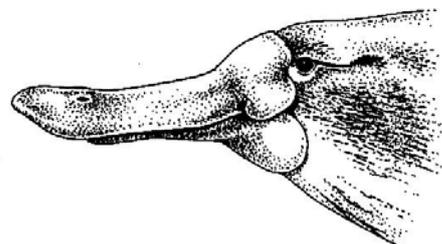
Poland: **dziobak**

Russia: **utkonós**

Holland: **vogelbekdier** ("bird beak animal")

South Africa (Afrikaans): **eenbekdier**

Indonesia: **platipus**



MORE NEWS ON FACEBOOK

Check out the “Australian Platypus Conservancy (Official)” Facebook page for more news about platypus and Australian water-rats. Articles posted in the last three months include:

- Sharing the Cost of Platypus Conservation – ShareGift helps APC
- Platypus Protection Protocols for Creekside Works
- Monumental Platypus – Platypus sculptures in public places
- A Tail from the Underside – Is the underside of a platypus tail bald or hairy?
- Tell-tale Tail – How to assess the condition of a platypus by squeezing its tail
- Platypus by the Book – Platypus appearing in literature
- Queanbeyan Platypus Count Update – Summary of recent results
- Dreamtime Platypus – Traditional Aboriginal knowledge of the platypus
- Revenge of the Platypus? – Archduke Franz Ferdinand and the platypus
- Imperial Platypus – Napoleon and the platypus
- Murray-Darling Plan Lacks Plans for Platypus – Albury platypus and flow
- Bottling It Up – How litter threatens the platypus
- Omeo Platypus Baby Bonanza – Results of recent APC trapping surveys
- Watch Out for Illegal Nets – How to spot platypus death traps
- Organising Platypus Surveys – Why so few live-trapping surveys?

The Facebook page also includes a “Sighting of the Week” – usually sent to us by someone in the community - to help highlight important conservation issues.

SPECIAL THANKS TO OUR SUPPORTERS!

The Australian Platypus Conservancy is a non-profit research and conservation organisation. The success of the APC's programs relies on the support of businesses, management agencies and individuals sharing our interest in one of the world's most amazing animals. We gratefully acknowledge recent help by the following supporters:

City of Banyule ■ City of Manningham ■ Decor Corporation ■ East Gippsland Shire
Goulburn Broken CMA ■ Norske Skog ■ North Central CMA ■ Parks Victoria
Platypus Outdoors ■ ShareGift Australia ■ Taronga Conservation Society
Upper Murrumbidgee Waterwatch ■ West Doncaster Veterinary Centre

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