



Ripples

Newsletter of the **AUSTRALIAN PLATYPUS CONSERVANCY**

GOOD NEWS FOR PLATYPUS REINTRODUCTION

The Conservancy's efforts to re-establish a platypus population in Cardinia Creek, a small self-contained catchment located south-east of Melbourne, have not been without difficulties. Some animals are known to have been killed in illegal opera house yabby traps (see *Ripples* no. 39), while others may have died as a result of injuries caused by litter (*Ripples* no. 47).

APC staff were therefore extremely pleased to capture five locally-born animals (four females and one male) in a live-trapping session carried out to monitor the status of the Cardinia Creek population in early October of this year. This was the highest number of adults and subadults recorded in a single survey since the reintroduction project began in 2004.

Platypus were present in Cardinia Creek until the 1983 "Ash Wednesday" bushfires incinerated virtually the entire catchment area. Trapping surveys carried out by the APC from 1999 to 2003 confirmed that platypus had disappeared from the system, despite the fact that the habitat had by then recovered from the effects of the inferno. There also appeared to be only an extremely slim chance that platypus would be able to recolonise the stream in the foreseeable future via natural migration, due to its isolated location.

The Conservancy (working at the time in partnership with Melbourne Water) therefore decided to try to re-establish the species by translocating surplus juveniles from elsewhere – the first time that such a project had ever been attempted with platypus.

The main source of platypus for transfer was the nearby Tarago River. This was known from live-trapping studies to support a large population that consistently generated many more juveniles than could be accommodated through local population turnover.

In April 2004, platypus returned to Cardinia Creek in the form of two young females and one young male released into the upper reaches.

The radio-tagged animals settled comfortably into their new home, finding appropriate shelter sites and foraging in a typical manner.

Following this initial success, the population was bolstered by translocating three first-year males and four first-year females over the next three years. Again, all of these animals settled quickly into normal behaviour patterns in their new surroundings.

The success of any reintroduction project will ultimately depend on the ability of translocated animals to produce offspring. Three juveniles were captured in a survey carried out along Cardinia Creek in April 2006 — the first year when breeding by translocated animals would have been possible. By the end of 2011, a grand total of at least 18 juveniles were known to have been weaned along this water body.

The fact that four grown females were captured in the most recent monitoring session has been further very positive news, especially as two of these animals were first marked as home-grown juveniles in 2007, and so have inhabited the area for nearly six years since hatching there.

The overall demographic profile of the Cardinia Creek platypus group now appears to be comparable to that of natural populations studied in similar water bodies elsewhere in the Melbourne region.

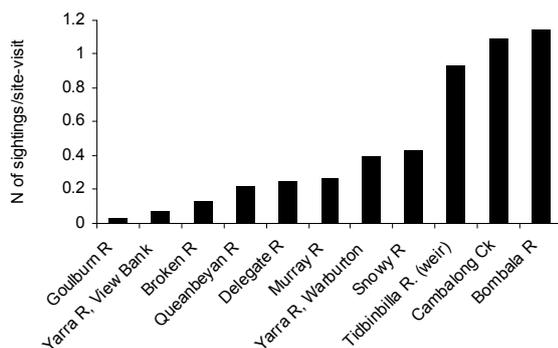
Accordingly, we believe it's fair to conclude that this project has been a success in attaining its original goal of restoring a viable platypus population to Cardinia Creek.

COMPARATIVELY EASY

How much does the frequency of platypus sightings vary in different river systems?

An answer to that question is starting to emerge, thanks to the efforts of hard-working volunteers contributing to the APC's *Platypus Count* visual monitoring program in Victoria (Yarra, Goulburn and Broken Rivers), the ACT and New South Wales (Murrumbidgee, Bombala and Snowy River systems), and along the Murray River between Albury and Lake Hume on the Victorian/NSW border.

The frequency of platypus sightings is known to vary on a predictable seasonal basis in both Victoria and NSW. Accordingly, the graph below depicts the average number of platypus seen per site in a given monitoring session in recent summers (December to February).



Platypus were recorded most frequently in the Bombala River and along one of its major tributaries, Cambalong Creek. As those of you who have visited the Bombala River near Bombala township may already know, this water body supports a robust platypus population, with one or more animals often observed foraging at any given spot right in the middle of the day.

Platypus were also seen very regularly in a weir pool located on the Tidbinbilla River at Tidbinbilla Nature Reserve. This finding is consistent with a well-established rule about platypus ecology, namely that substantial pools and backwaters (and their man-made counterparts, on-stream weirs) generally provide ideal feeding habitats for this species as long as the water isn't too deep (no more than 5-6 metres).

At the other end of the spectrum, the lowest frequency of platypus sightings was recorded in the Goulburn River near Seymour.

The middle reaches of the Goulburn (including those near Seymour) were renowned in the 1990s for supporting some of the most abundant and readily viewed platypus populations in Victoria. However, the number of sightings reported by landowners and anglers plummeted across the middle Goulburn catchment in the course of the decade-long drought that ended a little more than two years ago. The very low number of platypus sightings made in each of the last two summers suggests that the population near Seymour still has a considerable way to go to regain its former status.

The second lowest frequency of sightings occurred along the Yarra River at View Bank, in Melbourne's eastern suburbs. This area is close to the extreme downstream point where platypus continue to breed along the Yarra. By comparison, sightings were recorded about six times more often along the Yarra at Warburton, which is located many kilometres upstream of View Bank, not far from the point where privately managed river frontage gives way to state forest.

Elsewhere, the average frequency of platypus sightings in Queanbeyan township along the Queanbeyan River (which is about the same size as to the Yarra River at View Bank) was roughly midway between the corresponding average values for the Yarra at View Bank and Warburton.

The average frequency of platypus sightings in the Snowy River at Ironmungy Nature Reserve (downstream of Dalgety) was slightly higher than the average frequency in the Yarra at Warburton (with this section of the Snowy possibly also being a little wider on average).

Although the Broken River just upstream of Lake Benalla in Benalla township is roughly similar in size to the Delegate River at Delegate township, platypus were seen only about half as often in the former system as compared to the latter.

Last but not least, the average frequency of platypus sightings in the Murray River near Albury (which is typically 30-80 metres wide) was found to be only marginally higher than the average frequency of sightings recorded in the Delegate River (which is typically 5-10 metres wide).

YABBY TRAP UPDATE

The Conservancy has been campaigning for many years to reduce the number of deaths of platypus, water-rats and freshwater turtles in yabby traps, especially those sold as “opera house” traps (see *Ripples* no. 42).

The best available evidence indicates that illegal use of opera house traps in streams and rivers in south-eastern Australia is widespread and actually growing.

Although the vast majority of Australians do not approve of air-breathing animals being drowned as by-catch, the APC acknowledges that use of opera house traps is unlikely to be reduced until an alternative design can be identified which is both harmless to non-target wildlife and as easy to deploy as opera house traps in farm dams and the equivalent.

The APC is therefore working in partnership with Dr Tom Grant this summer to test the ability of wild platypus to escape in a timely manner from some alternative designs for enclosed, frame-style yabby traps.

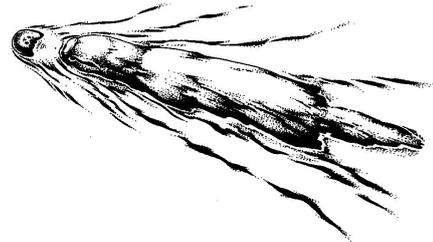
Trials will be conducted both at night and during the day to determine whether animals find it more problematic to escape from traps in the dark. The work will also compare how long it takes small juveniles to exit from traps as compared to older (and larger) adults. By sampling animals at sites in both Victoria and New South Wales, the possibility that platypus escape behaviour may vary in different parts of the species’ range will also be tested.

Results from the trials will be made freely available to all fisheries management agencies and other parties with a valid interest in how best to reduce by-catch in yabby traps. This research is being made possible thanks to generous support provided by the Taronga Conservation Society.



Did You Know That...

The Archduke Franz Ferdinand – whose assassination in June 1914 triggered the start of World War I – shot a platypus “with greatest joy” in a hunting spree carried out near Moss Vale, New South Wales in 1893. He killed nearly 300 native animals over a period of 3 days, including koalas, possums, wallabies, kangaroos, pademelons, ducks and magpies.



A NEW VIEW FOR PLATYPUS NEWS

Since *Ripples* first appeared in 1995, many changes have occurred in how the APC communicates with its supporters and other interested parties. For instance, the recently-established “Australian Platypus Conservancy (Official)” Facebook page enables us to post several news updates each week. Material placed on the Facebook page also supplements content on the APC website, which has itself been recently updated.

To provide feedback to participants in the *Platypus Count* visual monitoring program, the APC has been producing a second newsletter since 2007. Given the interesting nature of many findings from this program, material from the *Platypus Count* newsletter has sometimes featured in *Ripples*, resulting in some content being duplicated.

Accordingly, from the start of 2013 the two newsletters will be merged into one publication (to be known as *Platypus News and Views*). This will be produced quarterly, in line with the established *Platypus Count* reporting schedule (at the ends of February, May, August and November). In an ongoing bid to reduce use of paper, the newsletter will be mainly distributed electronically in PDF format, but hard copies will continue to be available to *Platypus Count* volunteers or *Friends of the Platypus* who prefer a more traditional format.

