

Platypus News & Views



Newsletter of the Australian Platypus Conservancy (Issue 75 – February 2019)

AUSTRALIAN PLATYPUS CONSERVANCY – 25 YEARS OF CREATING RIPPLES

Just over 25 years have passed since the Australian Platypus Conservancy was established in January 1994. At that time, the platypus's conservation requirements were poorly known and little information was available regarding its status in most places. The species was widely regarded as being common and undeserving of special environmental consideration, despite the fact that numerous factors were known to have reduced the extent and quality of platypus habitats across much of its range.

The APC initially addressed the lack of knowledge about platypus conservation needs through two complementary strategies. Firstly, overnight live-trapping surveys were carried out on nearly 500 occasions, providing some information on status for nearly two-thirds of the Victorian river basins where platypus occur. To develop a more detailed understanding of the platypus's distribution and abundance, particularly in places where the animals were likely to be under pressure, major mark-recapture programs were initiated in the Melbourne urban area (working in partnership with Melbourne Water) and the mainly agricultural landscapes of the Wimmera River catchment in western Victoria (working in partnership with a coalition of Landcare groups known as Project Platypus).

Secondly, studies were conducted to identify habitat requirements, assess the extent to which large-scale habitat improvement works affect platypus behaviour and reproductive success, and describe basic aspects of the animals' biology such as foraging patterns and burrow attributes. These activities were mainly carried out in partnership with management agencies and local councils, helping to ensure that findings contributed to practical on-ground action on behalf of the species. This eventually has led to some agencies making a more formal organisational commitment to platypus conservation, as exemplified by Melbourne Water's identifying the platypus as a core value in its 2018 Healthy Waterways Strategy.

As a natural extension of these ecological studies, the Conservancy commenced a multi-year platypus reintroduction program in 2004. In Year 1, three young animals were monitored after being translocated to Cardinia Creek in Melbourne's south-east, where the species had vanished following the 1983 Ash Wednesday bushfires. Three unmarked juveniles were subsequently captured and marked in 2006 (the first year when young could have appeared there), confirming that translocation can be used as a practical conservation tool to bolster or re-establish platypus populations.

The APC has also worked hard from the outset to encourage persons in the community to report their platypus sightings. In 1994, most official wildlife databases only accepted records provided by university and museum researchers or other experienced professionals. The APC recognised that sightings made by more casual observers can also be of enormous value as long as the accuracy of records – especially those made in unexpected places - is routinely verified by contacting the person for more details when needed. The APC launched its first community-based platypus sightings project – the 'Great Yarra Platypus Count' - in conjunction with *The Age* newspaper in late 1994. This project, and others that followed, yielded a wealth of new information about the species, including the occurrence of multiple platypus mortalities in opera-house yabby traps. Sightings sent to the APC are now routinely shared with the Atlas of Living Australia, the national wildlife database designed to store and present information obtained by 'citizen scientists' (see *PN&V* no. 71).

To address the risk caused by use of recreational yabby traps, the Conservancy carried out a series of carefully supervised behavioural trials from 2012 to 2015 to assess how easily platypus could escape from a variety of commercial and experimental trap designs. Working in concert with Dr Tom Grant, a very experienced platypus biologist based in New South Wales, the research team established that the only types of yabby trap that can be used without any real risk to air-breathing aquatic animals (platypus, rakali and turtles) are those that incorporate an open top and are free of any internal funnels. These findings in turn provided a factual basis for recommending that recreational use of enclosed yabby traps should be banned by all state and territory governments – as now enacted by the Victorian Fisheries Authority for all Victorian waters starting in July 2019.

In 1994, it was widely believed that platypus numbers could not be monitored using observational techniques because the species was almost exclusively active at night and was too shy to be seen consistently. However, the large number of reliable community sightings recorded by the Conservancy indicated that neither of these assertions was correct. This led to another APC initiative - developing a standardised visual method for monitoring platypus populations. After a four-year pilot study was successfully completed along Melbourne's Yarra River, the APC launched its volunteer-based *Platypus Count* monitoring program in 2008. This has grown to encompass a diverse range of water bodies in Victoria, the ACT and New South Wales, and is currently set to evolve into its next-generation descendant: the Australian Platypus Monitoring Network (see *PN&V* no. 74 and also page 3).

As well as providing a cost-effective methodology to track platypus numbers across the species' range, APMN will foster hands-on community engagement with platypus conservation. This has been a core aim of the Conservancy since it was founded, reflected in the thousands of volunteers that have participated in APC field work and the hundreds of public talks and school visits conducted by APC staff over the past 25 years.

In addition to the platypus, the APC has long been interested in championing the cause of the Australian water-rat (or rakali). In 1994 this very attractive native mammal was unknown by the average person in the street or at best was dismissed as 'just another rat'. By promoting the water-rat as 'Australia's otter' the APC has helped to change rakali's public profile: the species is now much more widely valued and is the focus of several local conservation campaigns. Its status, distribution and conservation needs are also becoming better known as a result of recent community-based survey programs carried out by the APC in both Victoria and the ACT.

After a quarter century of innovative and (we hope) useful work, the APC continues to develop new projects and partnership arrangements to further the cause of platypus and rakali conservation. Most recently, trials are currently underway to provide a better understanding of the strengths and limitations of using eDNA (DNA shed by an animal into the environment) to detect the presence of platypus and water-rats in a range of circumstances, and assess the relative effectiveness of using eDNA and sightings for this purpose.

The APC's progress as an organisation has been guided by a key image: expanding ripples of interest in the platypus that draw more and more people into helping to conserve the species over time. The relatively large volume of platypus-related activities being carried out across the animals' range in 2019 provides hope that their long-term survival is in much better hands as compared to early 1994. Given its own status as a non-profit, non-government organisation, the Conservancy's success has relied on funding and other forms of assistance provided by a large number of government authorities, philanthropic trusts, corporate sponsors and environmental groups, along with thousands of interested and concerned individuals. On behalf of our favourite species, we acknowledge all sources of support both past and present with deep gratitude.



APMN OFF TO A FLYING START IN THE GOULBURN-BROKEN AREA

Roll-out of the Australian Platypus Monitoring Network (APMN) has now started, with a very successful series of workshops and training sessions recently held at Benalla, Alexandra, Yea and Seymour in northern Victoria.

These activities have been carried out in partnership with the Goulburn Broken Catchment Management Authority, as part of the CMA's commitment to strengthening platypus conservation in both the Goulburn and Broken River systems.



An APMN volunteer training session held a short distance upstream of Lake Benalla

As described previously in *PN&V* no.74, APMN aims to empower community members to keep track of their neighbouring platypus populations. The APMN website and app are designed to make it easy for volunteers to both monitor platypus activity and upload standardised sightings records in the field. The information is saved in a database and summarised using a map and charts available to all website visitors, with registered volunteers also receiving personalised feedback about their own findings.

A simple menu on the Home page makes it easy to navigate to pages explaining how APMN works and how to get started as a volunteer, including a section that provides advice about spotting platypus in the wild. After registering to join the network, volunteers can log in and use a map to select their monitoring sites, with most persons typically deciding to visit 1-3 sites on a regular basis. New volunteers can either choose to monitor previously established sites (if some are already registered nearby) or to register one or more new sites. Persons who would like to monitor platypus activity on their own land are also given the option to designate a site as being 'Private', thereby restricting access to themselves and their family.

After that, it's really straightforward. Volunteers are asked to visit their sites at least once or twice a week on average, at any time that's convenient to them. Platypus activity is monitored by standing or sitting quietly for a standard period of 5-10 minutes while carefully scanning the nearby water surface for signs that one or more animals are active in the vicinity (generally detected most easily by the ripples that are created as a platypus swims and dives). The reason for having a somewhat flexible time period is that viewing conditions can vary from site to site and also from day to day (for example, depending on how windy it is). The guiding principle in all cases should be that the person conducting the scan feels that he or she has observed the water for long enough to report reliably if one or more animals are active there. Following each scan, the date, time of day and the number of platypus seen (including '0' if no animals are active) are uploaded using either the website or app.

The Conservancy will formally launch the Australian Platypus Monitoring Network on Thursday 2 May at the Australian National University in Canberra (hosted by the Fields Naturalists Association of Canberra). Training workshops – similar to those held recently in the Goulburn and Broken systems – will be organised in other parts of the platypus's range over the next two years to promote the establishment of geographically diverse platypus monitoring networks. Organisations that may be interested in sponsoring a 'roll-out' project in their area are invited to contact the Conservancy.

Development of the Australian Platypus Monitoring Network website and associated app has been made possible through the generosity of Dr Denis and Mrs Vee Saunders. The APC sincerely thanks them for supporting this and a number of other important conservation initiatives over many years.

APMN TRAINING SESSION – TEMPLESTOWE 14 JULY

As part of the ongoing roll-out of the Australian Platypus Monitoring Network (see page 3), the APC will be presenting a special training session along the Yarra River at Lower Templestowe on Sunday 14 July, starting at 3 pm. Participants will receive tips on how to go about spotting platypus in the wild and will be given guidance on APMN monitoring protocols.

Although the main APMN monitoring site at Lower Templestowe is located only 15 kilometres or so upstream of Melbourne's CBD, platypus have been recorded there in 26% of the scans conducted by volunteers since 2008.

This event is presented as part of the City of Manningham Environmental Seminars program. Bookings are essential and can be made via rebecca.cherubin@manningham.vic.gov.au.

PUBLIC TALK ON RAKALI – WARRANDYTE 3 JULY

The APC will be providing a free talk about rakali/Australian water-rats on Wednesday 3 July 2019 at the Warrandyte Hotel in the Melbourne suburb of Warrandyte. The talk is being offered as part of the City of Manningham Environmental Seminars program and is scheduled to start at 7.30 pm.

A number of talks on rakali will also be presented in the Greater Canberra region in late April and early May as part of the community-based survey of this species in the ACT (funded by the Wettenhall Environment Trust). Watch our Facebook page for details of dates and venues.

A RAT BY ANY OTHER NAME

We are often asked to clarify whether the name 'rakali' refers to the animal known as the Australian water-rat. The short answer is yes.

The scientific name of this species - *Hydromys chrysogaster* – roughly translates as 'golden-bellied water mouse'. Early European settlers sometimes referred to this animal as a 'beaver rat', though its appearance and behaviour are actually much closer to that of an otter than a beaver. In the 1990s the Australian federal government proposed changing the common name of the Australian water-rat to 'rakali', the term used by the Ngarrindjeri people – the original inhabitants of the lower Murray River and Coorong of South Australia.

HELPING US TO HELP THE PLATYPUS

On pages 1 and 2 we briefly outline the wide range of platypus and rakali research and conservation projects that have been undertaken by the Conservancy over the past 25 years. If you would like to support the APC's work, remember that donations and bequests to the Australian Platypus Conservancy are tax-deductible.

Australian Platypus Conservancy



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