A MATTER OF RECORD

We are sometimes asked why details of platypus and water-rat sightings reported to us via the internet are not automatically and immediately posted on the APC’s website, as is true for some other wildlife reporting sites utilising interactive mapping techniques. The short answer is that our experience indicates that community sighting reports need to be vetted fairly carefully before deciding if they qualify as a reliable record. This process is particularly important in the case of the most interesting reports – namely those originating in water bodies where platypus are believed to be rare or in grave decline. Without a routinely applied review process, a number of issues can easily corrupt the value of a sightings database.

Undoubtedly the most common problem is the fact that even the best-intentioned person can sometimes mistakenly identify another aquatic species as a platypus, particularly if the person hasn’t previously seen a platypus in the wild. A good example of this involved a recent report of a platypus seen from the Granite Island causeway at Victor Harbour in South Australia. The person concerned commented that he knew the sighting was highly unusual, but “…what I saw was definitely a platypus, and seen close up from above the water, where I was standing looking down at the animal. It was coming on for dusk but I could still see clearly enough…I saw its bill quite clearly.” Automatically posting this report on an interactive map would have resulted in a public record of a platypus sighting located more than 100 kilometres from the nearest confirmed population (on Kangaroo Island). However, after carefully reviewing some platypus and water-rat images and comparing them to what he recalled having seen, the person decided that his initial conclusion was wrong and he had actually observed a water-rat.

Another problem is that of unintended errors being made when providing locational details. For instance, a recent sighting report indicated that a platypus had been observed in the outback of Western Australia. A quick follow-up call established that the person making the report had simply misread his GPS. In other cases, misinformation is quite intentionally provided. It’s interesting how many people over the years have considered it wildly humorous to send us a report of a platypus being seen near the South Pole.

Judgment and follow-up are also sometimes needed to avoid misleading duplication of sighting records occurring. For example, it is not uncommon for legitimate sightings recorded in unusual places or circumstances to be reported by more than one person as news of the sighting spreads by word of mouth (we recently had the occurrence of a single displaced platypus reported to us by three different individuals, with the third report indicating that the animal had been found at a site located about 15 kilometres from the actual spot where it was rescued). In addition, some places may sporadically generate high numbers of reports because of “political bias” - i.e. a remarkably high number of sightings may suddenly emerge from an area subject to an unpopular development application.

Given the above, we’ve concluded that two essential rules for maintaining the reliability of a community-based sightings database include: (1) ensuring that an experienced biologist speaks to anyone reporting a platypus being seen in an unusual location before the sighting is permanently recorded, and (2) requiring that all reports, no matter where they occur, are based solely on first-hand information provided by the person who encountered the animal.
**EARLY BIRD CATCHES THE PLATYPUS**

Platypus are typically most active at night, presumably to reduce the risk that they’re seen by predators (such as foxes or the larger birds of prey). However, as shown by the success of the APC’s *Platypus Count* and *Platypus Group Watch* visual monitoring programs, these animals are also often seen during daylight hours, particularly near dawn or dusk.

For the last three years, Conservancy biologists have been monitoring platypus activity in the Murray River at Albury, with funding generously provided by Norske Skog. The study site encompasses 22 monitoring sites established at roughly regular intervals along 5 kilometres of channel. Three early morning and three late afternoon monitoring sessions are conducted in August (coinciding with the presumed start of breeding), January (presumed period of late lactation) and late April or early May (presumed start of juvenile dispersal). Each session involves two biologists respectively recording the number of platypus seen at half the monitoring sites, and is carefully timed to either start (morning) or finish (afternoon) when there is just enough light to distinguish a platypus reliably in the water. Monitoring methods are otherwise the same as those used by *Platypus Count* volunteers, with each session requiring about 1.5 hours to complete.

Has there been any difference in the frequency of platypus sightings in early morning versus late afternoon?

Given that these animals seem to prefer to feed at night, one predicts that their ideal routine will be to wake up at dusk and hope to finish foraging and go back to bed by dawn. However, circumstances might sometimes compel them to continue searching for invertebrate prey past the time it gets light – for example, if they have very high energy needs (as in the case of lactating mothers) or if food suddenly becomes harder to find (perhaps due to recent flooding). Such a behavioural pattern will result in fewer animals being active in late afternoon as compared to early morning. Our actual findings along the Murray River are summarised in the graph below.

As you can see, platypus were observed consistently more often in the early morning than late afternoon, with only 37% as many evening (as compared to morning) sightings recorded in January and 34% in April/May. Although animals were also recorded more frequently in morning than evening surveys in August, the difference between the two time periods was much less pronounced. It is tempting to hypothesise that this may at least partly reflect the fact that adult males tend to get up unusually early during the breeding season in hopes of being the first to woo local females who are ready to mate.

From a purely practical point of view, these results suggest that one cannot safely assume that platypus activity is symmetrically distributed across daylight hours when designing a research or monitoring program. By the same token, care should be taken when comparing sightings frequencies obtained in studies carried out in the same season but at different times of day.
BRINGING BACK MATAKUPAY

Swan Hill, a town located on the Murray River in northwestern Victoria, was so named by Major Thomas Mitchell in 1836 because his exploring party was kept awake by the noise made by a nearby group of black swans. However, aboriginal people already had a name for the area: Matakupaat, meaning “place of the platypus”. The local Wadi Wadi community also regarded the platypus (Matakupay) as their special totem.

European settlement brought huge changes to the Murray River system in the form of commercial fishing, dam construction, altered flow regimes, habitat degradation, increased salinity and introduction of pest species such as carp.

By the 1990s, platypus had declined precipitously in the river’s lower reaches. Nevertheless, members of the Wadi Wadi community recall watching platypus in creeks and billabongs in the Nyah Forest in the 1990s, and records held in the APC sightings database suggest that the species was still occasionally seen in the river proper near Swan Hill in this period. Unfortunately, platypus sightings in the Swan Hill-Nyah area have since continued to decline.

In response, the Wadi Wadi community has joined forces with Friends of the Earth Melbourne to establish the Matakupay Project, which aims to re-establish a locally viable platypus population. The APC has recently assisted this project by assessing platypus habitat quality and contributing to awareness of relevant conservation issues through a public talk, school classes and extensive media coverage. Unfortunately, the feedback to date appears to confirm that platypus have effectively disappeared from the Swan Hill-Nyah section of the Murray itself.

The good news is that the species may still occur in the Little Murray River, an anabranch of the Murray that rejoins the main river near Swan Hill. Furthermore, many of the Murray’s most pressing environmental problems will potentially be ameliorated by implementing the recently approved Murray-Darling Basin Plan. It is therefore quite possible that platypus will eventually be able to colonise the Swan Hill-Nyah area, particularly if a few animals still remain in the Little Murray River system.

Accordingly, the Matakupay Project faces some challenging tasks. These include setting up a monitoring program for platypus in the Little Murray River, working to improve habitat conditions for platypus, and negotiating with authorities to ensure that local water bodies which are most likely to support the species in future are guaranteed to receive appropriate water allocations.
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:

- Platypus in caves – records of sightings inside cave systems
- Gippsland Lakes water-rat study
- Charles Darwin and the platypus
- A rat by any other Name – rakali or water-rat?
- Why did the platypus cross the road?

Our Facebook page also includes a “Sighting of the Week” (selected from the many platypus and water-rat records sent to the APC by members of the community) which is used to highlight important ecological, conservation and research issues. Topics covered in the last three months include a fascinating interaction between a platypus and a little pied cormorant, platypus mating behaviour captured on video at a national park in Queensland, important platypus sightings in the Murray River system, an example of fox predation on platypus, the use of artificial water bodies by water-rats, and an incident involving the death of a water-rat in an opera house yabby trap set in a farm dam.

GIPPSLAND LAKES WATER-RAT TALKS

The Conservancy (in partnership with the Gippsland Lakes Ministerial Advisory Committee) is conducting a study to find out how populations of the Australian water-rat are distributed across the entire Lakes system. The APC will be offering free public talks on water-rats during 2014 and any school or community group in the Gippsland Lakes region interested in hosting such an event is invited to contact the Conservancy as soon as possible.

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 ■ Cardinia Catchment Landcare ■ Decor Corporation ■ East Gippsland Shire ■ Friends of the Earth Melbourne ■ Gippsland Lakes Environment Fund ■ Goulburn Broken CMA ■ Haileybury College ■ Mater Christi College ■ Norske Skog ■ North Central CMA ■ Parks Victoria ■ Platypus Outdoors ■ Taronga Conservation Society ■ Upper Murrumbidgee Waterwatch ■ West Doncaster Veterinary Centre ■