

Ripples

Newsletter of the **AUSTRALIAN PLATYPUS CONSERVANCY**

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MATTERS OF LIFE AND DEATH

Since the Conservancy was founded in 1994, APC researchers have recorded as much information as possible relating to platypus mortalities reported to us by members of the public. Whenever possible, we ask people to either send us a photograph of the remains or actually freeze the carcass until it can be picked up and a proper post mortem examination carried out.

To date, 234 cases of dead platypus originating in Victorian water bodies have been recorded in our files, of which 50 were badly decayed or otherwise provided no clues regarding how they died.

Of the remainder, 36 mortalities (15%) were ascribed to more or less natural causes, including predation (24 records), floods (7) and drought (5).

All other deaths appeared to be linked directly to human activities, including:

- (1) Drowned or starved to death in illegal nets and traps set to catch fish or crayfish/yabbies (102 mortalities)
- (2) Found dead with a fish hook snagged in the bill or foot, or fishing line wrapped around the body (10)
- (3) Drowned after entering water pumps, water wheels, water-powered turbines, etc. (10)
- (4) Entangled in or injured by litter (7)
- (5) Deliberately killed by humans (e.g. shot or clubbed to death) (5)
- (6) Run over by motor vehicle (5)
- (7) Drowned after becoming wedged in pipes, irrigation gates, etc. (4)
- (8) Died after being dug up by heavy equipment (2)
- (9) Drowned in bath tub used to water stock (1)
- (10) Killed in rabbit trap (1)
- (11) Poisoned by pesticide spill (1)

Some of the factors contributing to platypus mortality are likely to have been under-represented in our sample. For example, the proportion of animals killed by predators is almost certainly too low (as many victims presumably are eaten) as is the proportion dying as a by-product of drought (as platypus are rarely expected to die in the open next to a recently evaporated pool – instead, they're much more likely to die of predation, starvation or mischance as they wander about in search of water).

In terms of mortality linked directly to human activities, by far the single most important factor appears to be illegal netting, which accounted for more than half of all platypus deaths explained by a known cause.

With support from The R. E. Ross Trust, the Conservancy is currently involved in a campaign to combat the illegal use of enclosed yabby nets and traps, especially the "opera house" type. These traps are responsible for many platypus dying each year (as well as other native wildlife such as freshwater turtles).

Opera house traps have been banned in public waters in Victoria, the ACT, much of NSW and all

of Tasmania. Unfortunately, they are still legal in Queensland. Until there is uniform legislation, recreational anglers should consider always using hoop-style lift nets (or baited lines with no hooks) as legal alternatives to opera house traps. These methods pose negligible risks to platypus and most other wildlife, although over-harvesting is believed to be threatening some populations of native crayfish. The APC is also approaching major outdoor recreation and angling retail chains in order to ask them to consider phasing out the sale of opera house traps and instead stock only safer alternatives, such as lift nets.

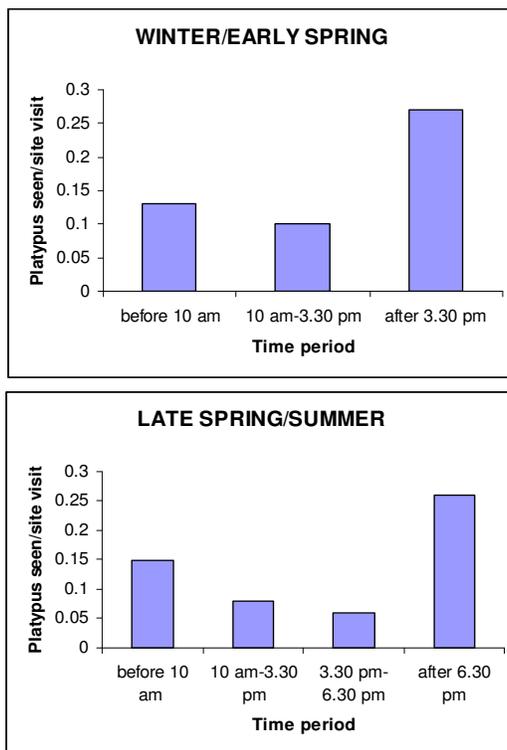
PLATYPUS NIGHT OR DAY?

Like many small to medium-sized mammals, platypus generally seem to prefer to be nocturnally active, presumably because this entails less risk of being detected and captured by predators.

However, there are potentially many reasons why a platypus may sometimes choose to be active during the day. For example, an animal may still be hungry when dawn arrives, or may decide to take advantage of solar warmth in winter. During the breeding season, males may travel long distances during daylight hours to seek out new breeding partners, whereas females may become more diurnal in hopes of reducing unwanted male attention.

So, in practice, how does the likelihood of seeing a platypus vary through the day?

The graphs below summarise how often platypus were seen by *Platypus Count* volunteers recording sightings in Melbourne along the Yarra River at different times of the day in winter to early spring (June-September) and late spring to summer (November-February) from 2007 to 2009. Only three time periods are shown for the colder months, given that day length is much shorter in June-September than in November-February.



It's clear that platypus can be regularly observed throughout the day in this part of the world in winter and early spring as well as late spring and summer.

In both periods, the frequency of platypus sightings was consistently higher in the evening (within 1.5-2.5 hours of dusk) as compared to the morning (within 2.5-4 hours of dawn). However, it is highly likely that this pattern reflects asymmetry in the activity patterns of *Platypus Count* participants as opposed to those of the animals: more than 60% of evening site visits were conducted within an hour of dusk, whereas less than 10% of morning site visits were conducted within an hour of dawn!

It's also clear that platypus are more likely to be observed either relatively early in the morning or late in the afternoon as compared to other times of the day. For example, a person who regularly watched for platypus along the Yarra before 10 am would be expected to spot an animal on about 40% more occasions than someone who consistently was on the lookout for the animals between 10 am and 3.30 pm.

In turn, this is why *Platypus Count* sightings records obtained in the middle of the day are considered separately from earlier or later records when we calculate the average monthly rate of platypus sightings for a given section of stream or river.

On the other hand, those who are optimists by nature may prefer to focus on the fact that even at the least promising time of day in late spring and summer (3.30-6.30 pm), a platypus could still be seen on average on 6% of visits made to sites located along the middle reaches of the Yarra River.

Did You Know That....

Studies carried out in captivity have shown that a mother platypus's daily food consumption rises as her offspring grow, peaking at about 80% of her body mass just before the young first emerge from the nesting burrow.

PLATYPUS GROUP WATCH KIT

Platypus Group Watch is now up and running, thanks to support from the Sara Halvedene Foundation. This program provides a framework for teams of volunteers to conduct their own visual monitoring sessions for platypus and/or water rats. Organisations that have already signed up include various Landcare and Friends groups, TAFE classes, Greening Australia and Green Corps teams, and even a mountaineering club. ACT Waterwatch is also carrying out group watch sessions as an outgrowth of its partnership with the APC.

Interested groups are invited to contact the Conservancy to receive a *Platypus Group Watch* information kit containing data sheets and advice about how to get started.

YABBIES OFF THE PLATYPUS MENU?

Fisheries Victoria has recently amended its regulations to increase the legal daily take of yabbies by persons holding a Victorian Recreational Fishing Licence from 20 litres to 30 litres. The change was apparently initiated in order to bring the bag limit for whole yabbies into line with the existing legal bag limit for yabbies held as tails (5 litres).

While the Conservancy certainly supports the concept that fisheries regulations should be internally consistent, we wonder whether a better approach would have been to reduce the daily bag limit for yabbies held as tails to bring it into line with the bag limit for whole yabbies.

After all, yabbies are not only esteemed by humans as a luxury food but are an important dietary staple for a range of aquatic wildlife, including many native fish as well as water-rats and platypus. Given the fact that many of these species have declined in Victoria after more than a decade of drought, surely it would be sensible to adopt a precautionary principle with respect to conserving what food supplies remain for them.

We also are concerned that increasing the bag limit for yabbies may well encourage the illegal use of opera house traps, which in turn will result in even more platypus dying in the traps (see page 1).

NEW PLATYPUS TO SPONSOR

You can help platypus research and conservation by sponsoring a platypus. Sponsorships also make great gifts for your family and friends.

Three new platypus—Firefly, Muddy and Pumper One—have recently been added to the list of animals which can be sponsored, together with an old favourite, Double Trouble.

Sponsorship costs are: single platypus (\$15.00), two platypus (\$25.00), 3 platypus (\$32.50), all four animals (\$40.00).

Biographical details about the four platypus listed above can be viewed on the APC website (www.platypus.asn.au). To sponsor one or more, simply let us know by email which animal(s) you'd like to sponsor, the human name(s) that you wish to appear on sponsorship certificates, and details of the credit card to be charged. If you prefer, you can also mail the information to us with a cheque or bank draft in Australian dollars.

PARADOXICAL PLATYPUS RE-PRINTED

David Fleay was the first to breed the platypus in captivity in 1943-44. *Paradoxical Platypus: Hobnobbing with Duckbills* describes this event along with other ground-breaking platypus experiences, including translocating animals to Kangaroo Island and successfully transporting the species to a zoo located in New York City in the 1940's.

The Friends of Fleays has recently published a new edition of this classic book, with funding provided by the Queensland Government. The cost is \$35.00. To order a copy, email friendsoffleays@yahoo.com.au, phone (07) 5576 2411, or contact the Friends of Fleays at P.O. Box 3454, Burleigh Town, QLD 4220.