

Ripples

Newsletter of the **AUSTRALIAN PLATYPUS CONSERVANCY**

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A TALE OF TWO MALES

It's always nice to catch up with old friends, including the four-legged variety. Late last year, Conservancy researchers were pleased to renew their acquaintance with two platypus that have been periodically entering survey nets for nearly a decade, as part of the Melbourne Water urban platypus program.

Male 636D42 was marked with a uniquely coded Trovan microchip in February 1996, in the course of the first live-trapping survey ever undertaken along Monbulk Creek, in Melbourne's southeastern suburbs. He was identified to be a subadult (or second-year) animal, weighed 1830 grams, and was in above average condition based on the amount of fat deposited in his tail.

636D42 has since been captured 7 times—in June 1997, February 1998, December 2000, December 2001, August 2003, October 2004 and November 2005—at sites distributed along 12-13 km of stream channel.

His weight has ranged from 1825 to 2120 grams, with the highest weights achieved in spring (August–November). There is no evidence that he has grown appreciably since he was first encountered (at the age of about 16-17 months): measurements of head-tail length have differed by less than 5% over the period, in line with variation related simply to his posture and orientation.

In fact, the only really notable change to his appearance over time has involved the venom-delivering spurs located on his inner hind legs. When first examined, these were about 17 millimetres long and very sharply pointed. Over the next 7 years, each spur gradually became blunter. Then, in October 2004, 636D42's left spur was found to have vanished entirely—snapped off at the base!

Male 971857 was first recorded along the middle reaches of Monbulk Creek in March 1996. He was a recently weaned juvenile, weighed just 1000 grams and was otherwise rated as thin. Happily, he managed to live through the following winter and has since been recaptured 9 times—in January and June 1997, January and September 1998, November 2000, October 2002, August 2003, October 2004 and November 2005—at sites located along 7-8 kilometres of stream.

971857's weight increased by more than 50% between the date he was first captured and when he was next encountered as a subadult, 10 months later. His head-body length also increased in the interim, by around 10%. Since becoming a fully mature adult, his weight has fluctuated between 1705 and 1975 grams, with the highest value recorded in August 2003—the same month when 636D42 attained his maximum known weight.

The fact that platypus sometimes survive for a decade or more in suburban habitats is a tribute to the species' resilience and adaptability. Given that male platypus are expected for a variety of reasons to die at a younger age than females, the longevity of 636D42 and 971857 is an extremely interesting as well as pleasing new finding.

In a practical sense, it means that platypus do not need to reproduce successfully every year for populations to persist through time. However, it also implies that the presence of platypus in

waterways that have been badly degraded by drought or other impacts should not in itself be grounds for complacency—if conditions are consistently too poor for young animals to be recruited, the population will eventually disappear.

THE QUESTIONABLE PLATYPUS

APC staff answer platypus-related questions nearly every day, after people get in touch with us by phone, after knocking on our front door at Toorourrong Reservoir Park, or via the internet. Some questions asked by overseas researchers are quite technical and in some cases impossible to answer—the answer simply isn't known. We also get asked a lot of questions by students of all ages and their teachers, property owners and other persons interested in conserving the species, and a diverse spectrum of individuals from around the world who may be best described as “platypus enthusiasts”.

Here are some repeatedly asked or unusual questions along with their answers, formulated to the best of our current knowledge:

Are platypus good to eat?

We don't know of any person in recent times who has tried dining on a platypus. According to Harry Burrell (a keen naturalist and archetypal platypus enthusiast who wrote a book about the species in the 1920's), a letter published in the *Sydney Daily Telegraph* in 1923 reported that some miners ate one and found it to be “a somewhat oily dish, with a taste between those of red herring and wild duck”. Burrell also quotes the remarks provided by R. Semon, published in 1894, that aboriginal people residing near the Burnett River did not include the platypus in their diet because the meat had “an objectionable smell”, presumably related to scent glands found at the base of the platypus's neck.

Can platypus jump?

This question is mainly raised by American school students in grade 5, apparently after being taught that “elephants are the only land mammal that cannot jump”. While not wishing to undermine the efforts of American educators, we feel quite confident that platypus are at least as inept as elephants when it comes to launching themselves up off the ground. This generalisation is based in part on our understanding of how the platypus skeleton is constructed: the animal's limbs extend horizontally from the body, so the chest and abdomen are actually in contact with the ground at low speed. Furthermore, the joints and ligaments which bind the platypus's legs to its body are designed to facilitate rotational (as opposed to back and forth) limb movements: the platypus can swim and dig very efficiently, but is poorly equipped by nature to compete in any sort of track or field event.

Can platypus climb?

The platypus's front foot is highly specialised, with a broad band of webbing extending well beyond the end of the toes to assist swimming. In turn, this tends to preclude any ability to grasp or manipulate objects such as tree branches. However, platypus are exceptionally inventive and determined creatures when it comes to scaling surfaces that stand in their path. They can scramble up steep rocky banks with aplomb, and have also been known to try to escape from the confines of a galvanised metal tank by wedging themselves between the side of the tank and a vertical water pipe and propelling themselves upwards like a giant inchworm.

Can platypus be kept as pets?

Platypus are notoriously difficult animals to keep in captivity. They eat a lot of food (in the order of 20% of their body mass each day) and are also quite picky about what they eat, preferring live aquatic macro-invertebrates such as insect larvae, worms and crayfish. Feeding and exercise tanks need to be as roomy as possible (after all, wild platypus have home ranges extending for a kilometre or more) and the water must be kept clean and fresh by appropriate use of automatic filters or being changed each day. Adult males in particular can be dangerous animals to handle—while the venom delivered by platypus spurs is not considered to be life-threatening to

humans, it can cause excruciating pain. Sensibly, there is no place in Australia where a platypus can be legally maintained as a pet, nor any legal options for exporting the animals as pets overseas.

Did You Know That....

Platypus occur along the east coast of mainland Australia to about the latitude of Cooktown in Queensland. It has been suggested that the absence of platypus from rivers located farther north in Cape York and those draining into the Gulf of Carpentaria may be due to predation by crocodiles.

AUSTRALIAN GEOGRAPHIC SUPPORTS NEW CONSERVATION LEAFLET

In many ways, platypus make ideal neighbours: they don't trespass on land, interfere with livestock or cause any other sort of management problem, make any appreciable noise, or overpopulate their habitat.

People almost always enjoy the fact that platypus live in local water bodies, in part because this says something quite positive about the quality of the area as a place for people to live as well as wildlife. So what can people do both to protect existing platypus populations and encourage the animals to recolonise places where platypus no longer occur?

Australian Geographic will be holding a special fundraiser from April to June 2006 to raise money for a new APC leaflet highlighting some of the practical measures that can be undertaken to assist platypus conservation.

The leaflet will be designed to be of interest to a wide audience, from professional waterway managers to landowners, conservation volunteers and students.

It will focus particularly on the issue of litter, which continues to be a major problem for platypus welfare both in urban and rural areas. A range of other platypus conservation issues will also be discussed, including the vital importance of conserving water on the world's driest inhabited continent, and suggested ways to improve platypus habitat.

Special platypus stickers can be purchased at Australian Geographic shops during the fundraising period and donations can also be made at all AG stores or directly to the Society.

AUSTRALIAN GEOGRAPHIC LECTURE

The APC's platypus research in suburban waterways will be featured in an article titled "Wild Melbourne" in the forthcoming April-June issue of *Australian Geographic* magazine.

Coinciding with this article and the Australian Geographic platypus conservation fundraiser, the Conservancy is presenting an illustrated lecture about Melbourne's platypus on behalf of the Society.

The talk will be held at the Melbourne Museum's *The Age* Theatre on Tuesday, 23 May at 7.30 in the evening.

For more details, contact Australian Geographic, PO Box 321, Terrey Hills, NSW 2084.

FORTHCOMING APC PUBLIC TALKS IN 2006

Sunday 23 April at 2.30 pm. Edendale Community Farm, North Eltham (on platypus conservation as part of the Shire of Nillumbik environmental workshop series).

Wednesday 7 June at 7.30 pm. South Warrandyte Hall (on Australian water-rats as part of the City of Manningham environment series).

Other talks being planned for the winter of 2006 will be held at Echuca (on platypus) and Benalla (on Australian water-rats).

For additional details, please contact the Conservancy.

SPONSOR A PLATYPUS

Four platypus—Double Trouble, Lucky, Little Notch and Magellan—can be sponsored to assist the APC's research and conservation programs.

The cost of sponsorship (in Aus. \$) is as follows:

1 platypus only: \$10.00;	2 platypus: \$18.00;
3 platypus: \$25.00;	All four: \$30.00.

Further information about the four featured platypus and sponsorship application forms can be obtained by visiting the APC website or by contacting the Conservancy directly.