

## New Conservation Initiative to Save the Woylie from Extinction in the Wild

SIX hundred thousand dollars was recently pledged by the Western Australian (WA) Government to fund an Emergency Conservation Action plan for the Woylie *Bettongia penicillata ogilbyi* to establish insurance populations at risk of extinction in the wild. \$500,000 will be used by The Department of Environment and Conservation to establish a 400 ha predator-free enclosure in the Perup Nature Reserve (300 km south of Perth, WA) that should be capable of naturally supporting up to 500 woylies. At least 40 founders will be sourced from the surrounding area, which previously constituted the largest of three indigenous populations that persisted after pan-continental declines of the species in the 19th and 20th centuries.

In 1996, the Woylie was the first Australian vertebrate to be removed from state and national threatened lists in response to a spectacular recovery facilitated by extensive fox-control and woylie translocations

since the 1970s (see Western Shield Project at

<http://www.dec.wa.gov.au/programs/western-shield/index.html>).

Unexpectedly however, the species is now relisted as endangered or critically endangered (depending on jurisdiction), as a result of even more spectacular population collapses that have so far lead to an 80% decline of the species since 2001. As yet there have been no clear signs of a recovery. Since 2002, the Perup population has reduced by more than 97% to almost undetectable levels.

The remaining \$100,000 of the WA Government pledge will be directed towards a collaborative captive breeding program at the Perth Zoo, with a focus on conserving the genetics of the Battalling Woylie population (150 km south of Perth), which has unique genetic attributes and has been reduced by more than 97% to fewer than 100 individuals.

The cause of the recent declines remains to be verified, but both predators and disease have been implicated (see Woylie Conservation Research Project at

[www.dec.wa.gov.au/programs/saving-our-species/woylie-conservation-research-project.html](http://www.dec.wa.gov.au/programs/saving-our-species/woylie-conservation-research-project.html) — <http://www.dec.wa.gov.au/programs/saving-our-species/woylie-conservation-research-project.html>).

Both of these initiatives will present particularly valuable research opportunities to improve the understanding of species and the declines in a manner that is necessary to deliver a sustained long-term conservation outcome for an otherwise robust species with a proven ability to bounce back from the brink of extinction.

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### VIEWPOINT

## The True Cost of Bottled Water

OUR addiction to bottled water is costing us dearly — both economically and environmentally. Millions worldwide do not have the luxury of quality tap water, but many of us do, so why do we continue to put ourselves out of pocket and our environment at risk?

### The economic cost

While we often blame the weekly petrol bill for tipping our budget into the red, bottled water is another less publicly vilified cost eating a substantial hole into our back pockets. Annually in Australia, our habit costs us more than half a billion dollars (Bottled Water Alliance 2009). When you take into account that we can get exactly the

same product virtually free from our taps (approx. \$1.20 AUD per tonne), it highlights just how exorbitant a fiscal cost it is. In most instances a litre of bottled water is more expensive than a litre of petrol.

### Resources and emissions

Environmentally the costs are even greater. More than 60 000 tonnes of greenhouse gas emissions are emitted every year as a result of our bottled water use — that's the equivalent of the emissions 13 000 cars generate over 12 months (Bottled Water Alliance 2009).

Additionally, there are the possible adverse affects on groundwater

levels if more water is taken out than is naturally replenished.

From a manufacturing point of view, Australia uses more than 300 000 barrels of oil a year to make polyethylene terephthalate (PET) bottles for bottled water and the manufacture of every tonne of PET produces around three tonnes of carbon dioxide (Pacific Institute 2009).

There are also the costs, including economic costs, of transporting the bottles across the globe and refrigerating them in-store. When you take these costs into account, at a minimum the energy costs throughout the lifecycle of a bottle of water are equivalent to, on average, filling up a quarter of the