

## INTERVIEW WITH A RESEARCHER - 2014



RESEARCH FUNDED BY NATURE FOUNDATION SA

RESEARCHER: HANNAH BANNISTER, UNIVERSITY OF WESTERN AUSTRALIA PHD STUDENT  
RESEARCH PROJECT: FACTORS INFLUENCING THE REINTRODUCED SUCCESS OF THE BURROWING BETTONG (*BETTONGIA LESUEUR*) TO ARID AUSTRALIA



A burrowing bettong begins eating immediately following its release, seemingly unbothered by the trapping, processing and travel it went through to get there!  
Photo: Hannah Bannister

### **What was the aim and purpose of your project?**

This project aimed to determine which factors influence the success of the reintroduction of the burrowing bettong (*Bettongia lesueur*) to arid Australia. The primary focus of this research was to determine the influence that supplementary feeding and predator deterrents had on their success. Other factors that would influence the results of this project was the impact of native and introduced predators as well as competition with introduced herbivores. If successful, this project would result in the establishment of the first free-ranging population of burrowing bettong on mainland Australia since their mainland extinction in the 1960s.

### **Summarise the results of your project.**

Through a series of experiments involving the release of burrowing bettongs at multiple sites with different food and deterrent combinations, I was able to determine that supplementary feeding encourages site fidelity in burrowing bettongs, as released bettongs remained close to supplementary feeders. The results from the predator deterrent trial showed that bettongs sprayed with predator deterrent survived for longer than bettongs that were not sprayed, however these bettongs were also aided by having lower predator and rabbit numbers at their release site and so further testing is required. Sadly, despite almost 1500 burrowing bettongs being released, after five

months (or less at some sites) there was no sign of any survivors. We believe predators, including introduced cats and foxes, played a major role in the failure of the reintroduction. However, the positive impacts of supplementary feeding and predator deterrent may be useful for future reintroductions.

A burrowing bettong sampling a peanut butter and oat ball, used to bait traps.

Photo: Hannah Bannister



#### What is the most exciting thing about this work?

- Watching burrowing bettongs going about their business during the night is always entertaining – they have great character!
- The landscapes in the arid zone are amazing, and my work often meant that I got to watch some beautiful sunrises!
- Handling bettongs to take important measurements is exciting enough in itself, but being able to peer into a female's pouch and see a joey the size of a jellybean is an experience like no other.
- Working in arid zone means I often stumble across other interesting arid zone animals, including lots of dragons and birds.
- Be spending a lot of time at the Arid Recovery Reserve (where these bettongs came from) this meant that I was able to see other rare mammals, including bilbies, western bandicoots and greater stick-rats.

“being able to release an animal from a semi-captive environment into the wild is such a rewarding experience and something that not many people get the opportunity to do in their lifetime, it's a memory I will treasure forever.”



Burrowing bettongs using a supplementary feeder, designed to reapply predator deterrent as the bettongs enter and exit the feeder.