

Evaluating the survival of rehabilitated Common Wombats (*Vombatus ursinus*) released into free-living populations

To assess the survival of rehabilitated wombats we proposed measuring and monitoring various components of both the released animals and the resident population. These included looking at the behaviour and activity of the released animals, identifying what normal wild sub-adult wombat behavior is and monitoring the population dynamics of the resident wombats. This is a long-term project, so to date no definitive results are available, however research has progressed well over the last 12 months.

Two sites within the Braidwood region have been established as suitable high quality release sites. To set up each site all burrows have been mapped and measured, pegs have been placed in each entrance for hair tape surveys, and scat areas have been measured and marked. A hair census survey was completed in March 2011 at the Berlang site and samples are awaiting analysis. These results will provide the start to our understanding of the resident wombat population. It will give us information on how many wombats are using this site, the sex ratio and the relatedness of the individuals. The use of remote census cameras at the site will supplement this data. They are providing information on individuals, such as approximate size of animals, coat colour, mange infection and presence of pouch young. The cameras are also providing information on patterns of burrow sharing, movement patterns and other information on behaviour. For example, timing and duration of daytime basking by younger wombats is being measured, behaviour considered important for metabolic requirements. Repeated surveys every six months over the life of the project will build a detailed picture of the population dynamics and behaviour of wombats at these sites.

The first rehabilitated animal was collared and released at Berlang in June 2011. This animal was a male weighing 27.4kg and named Bumper by his carers. Bumper was released by the soft-release pen method routinely used by the Native Animal Rescue Group. After two days in the pen Bumper dug his way out and moved into the wild population. Since release Bumper has not been observed to move more than 300 meters from the release site and has shown strong burrow fidelity to two burrows approximately 30 meters apart. It was expected that male animals would stay on site because of the male philopatry displayed in wild populations. Current observations would also suggest that Bumper is spending extended periods out of the burrow during daylight hours. Confirmation of this observation cannot be made until the collar is retrieved, which will be mid April 2012. At that time the hourly GPS location fixes can be downloaded and his movement patterns analysed.

The wild male counterpart was captured and collared in July 2011. This wombat has also displayed great site and burrow fidelity. He has not been observed during the day as frequently as Bumper, however again until the collar is retrieved such observations can only be treated as anecdotal. There will be minimal disturbance of the animals from now on to reduce our impact on their behaviour. Their positions will be checked fortnightly and scats will be collected monthly to monitor stress levels.

Over the next twelve months research will concentrate on maintaining the hair census survey timetable at both release sites and developing the genetic hair analysis

laboratory protocol. The RSPCA Alan White Scholarship was instrumental in launching this research by supporting the purchase of the first two GPS radio-collars and we are most grateful. Future releases will follow when further funding can be sourced to cover the cost of additional collars. With only preliminary results available there have been no publications associated with this research besides a poster presented at the National Wombat Conference in March 2011 outlining the research project (previously supplied).



Photo 1. Bumper collared and ready for transport to release site.



Photo 2. Bumper ready to leave the release pen.



Photo 3. Bumper living in the wild.