

Wombat Whispers

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Hello members

In our last newsletter for 2005, we look at:

- some funding activities undertaken by The Wombat Foundation;
- the retirement of the Honourable Pat Comben as a director;
- the appointment of Jackie French as a new director;
- acknowledge the efforts of some Members;
- developments in the field, in Alan Horsup's "Burrow Bits" showcasing the work of Dr Steve Johnston.

Funding

The Foundation has been forwarded the sizeable proceeds of the cocktail function held in Sydney in late 2004 by an interested group. These funds have enabled the Foundation to begin supporting research and associated activities.

Some \$20,000 has been applied to the efforts of Dr Steve Johnston. Dr Johnston is undertaking captive breeding techniques on Southern Hairy-nosed Wombats at Rockhampton Zoo. This is expected to be a crucial part of the recovery process for the Northern Hairy-nosed Wombat. Dr Johnston's article is included in this newsletter.

The Foundation has also contributed some \$7,000 towards electrical work required at Rockhampton Zoo in order to facilitate video monitoring activities.

Inside this Edition

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Director Change

Pat Comben

Pat has been on the Board of the Foundation since 2003, and was a foundation director. Pat assisted us in the Foundation's formulative stages, and his knowledge of charity matters and government processes was invaluable. For personal reasons, Pat elected to retire and not stand for re-election at the recent Annual General Meeting. His contribution is very much appreciated, and we wish he and his wife all the best for the future.

Jackie French

Jackie will be well known to many of you from her numerous books for both adults and children, and TV appearances. As many of Jackie's books will testify, she has a special interest in wombats, and lives with many Commons at her little place in the bush.

We welcome Jackie as a director, and look forward to her passionate involvement.

Members' Contributions

It would be difficult to accommodate the growth of the Foundation without the very useful volunteer work done by some of our Members. Those worthy of special mention and thanks are:

Fran McFadzen of Emerald, Queensland. Fran converts and formats each newsletter into the final polished product which you are now reading.

Charmaine Skerman of the Gold Coast, Queensland. Charmaine maintains the financial accounts.

Kathy Humphery of Hillsdale, NSW. Kathy maintains the Members' Register, and will be dispatching future newsletters to Members. In the new year Kathy will advise you of a dedicated Wombat Foundation email address, which you should use to advise of any address changes.

We wish all Members and wombats a happy and safe holiday season. Your continued interest and support is very much appreciated.

Garry Richmond

Secretary
Wombat Foundation

Burrow Bits

"BIG BROTHER" FOR WOMBATS

Research supported by the Wombat Foundation is making great progress into understanding the captive husbandry of Southern Hairy-nosed Wombats.

The project is centred on 8 female and 4 male wombats located at a specialist wombat breeding centre at Rockhampton Zoo and is a joint research program between the University of Queensland and the Queensland Environmental Protection Agency.

The ultimate objective of the project is to provide a secure environment for the establishment of a self-sustaining captive colony of Northern Hairy-nosed Wombats.

The project is the PhD research program of Ms Lindsay Hogan from the School of Animal Studies at the University of Queensland. Lindsay enters her PhD after conducting an honours research program in which she studied stereotypic behaviours in captive common wombats. She has also received an Australian Postgraduate Award, a Queensland Government Smart State Scholarship and in 2005 was awarded "University of Queensland's Graduate of the Year".

Lindsay is supervised by Dr Steve Johnston (a reproductive zoologist), Prof Clive Phillips (animal behaviour expert) and Dr Alan Horsup (project leader of the recovery team for the

Northern Hairy-nosed Wombat). We are also fortunate to have on board, Dr Vere Nicolson, the senior wildlife veterinarian of Dreamworld, who provides excellent veterinary support for our study.

Our research falls into two fundamental components.

The first is to examine ways of gentling animals to human presence so that wombats become less stressed to basic husbandry procedures. It is our proposal, that if animals are less stressed, then they are more likely to survive and breed in captivity. While this may not be rocket science it is easier said than done. Previously, there have been problems with the initial establishment of SHN wombats into captivity and this issue needs to be addressed before NHH wombats can be safely introduced.

A preliminary study on gentling procedures of SHN wombats has proven remarkably successful with flight-distance (distance before wombat moves away from approaching human) being substantially reduced in just a few weeks of gentling. The next phase of this project will validate these observations with measurements of stress hormones.

The second component of the research will be to establish techniques for assessing reproductive status in both male and female wombats in order to better understand the seasonal breeding patterns of SHN wombats in Rockhampton. This will allow us to make informed decisions about the reproductive management of the population. Changes in testosterone concentrations, sperm production, accessory gland size, testicular size and sexual behaviour will all be monitored throughout the year. We are currently three months into this study and all is going well.

Probably the most exciting part of our research program is the development of some new non-invasive ways of monitoring female reproduction in captive wombats. It is like "Big Brother for wombats" as we have installed a series of 16 cameras (4 per enclosure) in the den and outer enclosures of the wombat facility. Wombat behaviour can be monitored 24h a day, so that any oestrous behaviour or mating activity is captured on video.

Added to this we have attached small activity meters to our wombats that measure movement patterns by a transmitting a radiofrequency signal to a remote data logger. In species like dairy cows and even humans, there is a very strong relationship between activity level and oestrus. The monitoring of wombat reproductive behaviour will also be validated by examining reproductive hormone metabolites secreted in their faeces.

Since we started the program in 2003, a total of 5 pouch young have been born at the facility and we have recently observed a number of mating attempts in females that have yet to give birth. Clearly, our captive wombat husbandry is working - our girls are cycling and boys are interested in sex.

Every month we are making improvements to our captive management of this species and it won't be too long before we apply this knowledge to NHH wombats.

We are extremely grateful to the wombat foundation for providing us with the funds to support our research.

Dr Steve Johnston
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"Wombat Whispers" is the official communication of The Wombat Foundation, GPO Box 5302, SYDNEY NSW 2001.

Donations always welcome!



Lindsay and one of the female wombats "Esme"