



## Wildlife health in Australia

The intention of this issue is to improve awareness of the role of wildlife health in human health, biodiversity, tourism and agro-economy in Australia.

The papers have been selected to highlight the importance of wildlife diseases with an emphasis on diseases with zoonotic potential, those that have threatened native fauna through causing population declines, or those that may threaten Australia's trading status.

Wildlife health investigation in Australia is conducted largely on an *ad hoc* basis, however, current mechanisms have led to the successful detection of several emerging diseases of significance including: Hendra, Menangle and Australian bat Lyssavirus, kangaroo blindness; *Leishmania* sp in macropods and chytrid fungus infection in amphibians.

Australian Universities, zoos, wildlife agencies and conservation departments invest hundreds of thousands of dollars annually in sample collection and diagnostic testing for diseases in Australian wildlife. However, most of this information, until now, has not been collated, analysed and distributed in a coordinated way. We are now entering an exciting new era. Along with the emergence of numerous disease entities, we also have the emergence of wildlife health surveillance systems to improve our ability to detect and manage diseases. In the last two years, the Australian Wildlife Health Network (AWHN), and the Australian Biosecurity Cooperative Research Centre for emerging diseases (AB-CRC), amongst other organisations,



**Kaye Humphreys**

Veterinary & Quarantine Centre  
Taronga Zoo, PO Box 20,  
Mosman, NSW, 2088  
Tel: (02) 9978 4753  
Fax: (02) 9978 4516  
E-mail: [khumphreys@zoo.nsw.gov.au](mailto:khumphreys@zoo.nsw.gov.au)

have been set up to facilitate and research wildlife health issues in Australia.

The Australian Registry of Wildlife Health (ARWH), established to monitor wildlife disease at Taronga Zoo and managed by veterinary pathologist Karrie Rose, has 20 years of accumulated information and materials relating to diseased and healthy Australian native fauna. As well as providing a diagnostic service to the zoo, it also focuses on the diagnosis and identification of the causes of outbreaks of disease and sudden death in wildlife populations throughout Australia. Both the AWHN and the ARWH have recently launched websites which should improve reporting and recognition of emerging wildlife disease in Australia.

In the past, wildlife health investigations in Australia have been delayed by a lack of awareness and funding, falling through the gaps between agriculture and conservations/environment departments, with both agencies claiming that wildlife health is not their core business. Currently the AWHN is well placed to improve and co-ordinate wildlife health surveillance in Australia, but the network and most wildlife health investigations are only funded through the state and commonwealth agriculture departments. Improved wildlife health surveillance in Australia will rely on engaging conservation/environment departments, tourism, wildlife industry organisations, and human health departments to support the communication infrastructure and participate in a cost-sharing arrangement for disease investigations.

On an individual basis, we should all remain mindful that Australia enjoys a unique fauna and disease status. Exotic and emerging diseases may present differently than expected based on experience overseas and we need to keep an open mind regarding the presentation of exotic and emergency animal diseases. We need to report any disease entities of concern to the AWHN or state agriculture departments so that they may provide assistance with the investigation.

I commend this edition of *Microbiology Australia* to you. I'm sure you will find the many and varied articles on wildlife diseases fascinating.

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