KANGAROO RESEARCH GETS A BOOST FROM AWS SCHOLARSHIP

In 2014 UTS postgraduate student Ray Mjadwesch commenced his thesis researching the history and status of the four large macropod species, the western grey kangaroo (*Macropos fuliginosus*), eastern grey kangaroo (*M. giganteus*), the wallaroo/euro (*M. robustus*) and the red kangaroo (*M. rufus*), in New South Wales.

Ray is using, amongst other things, vegetation types and land use in New South Wales to characterise landscapes in terms of habitat values for kangaroos, and is then sampling various habitat types to develop stratified population models for the species within a contemporary land-use context.

How does human activity affect kangaroos? Population centres, roads and intensive agriculture all have known impacts on wildlife; it is expected that the widespread and continuous kangaroo meta-populations that existed at settlement in 1788 will have fractured into sub-populations, with some landforms today completely expunged of kangaroos, where they had formerly abounded.

Fieldwork commenced in 2015. With the help of the **2015 Australian Wildlife Society's Wildlife Ecology Science Research Scholarship**, Ray purchased 24 camera traps which are being deployed in arrays covering 25 km^2 blocks across New South Wales, to quantify densities and distribution of target species. This equipment is vital to the gathering of the data that will confirm kangaroo presence and abundance.

One of the study sites is at 'Narimba', a wildlife sanctuary to the west of Narrandera in the Riverina of south-western New South Wales. As might be expected, it is already clear that while red and grey kangaroos are thriving in the sanctuary where remnant habitat provides shelter and there is

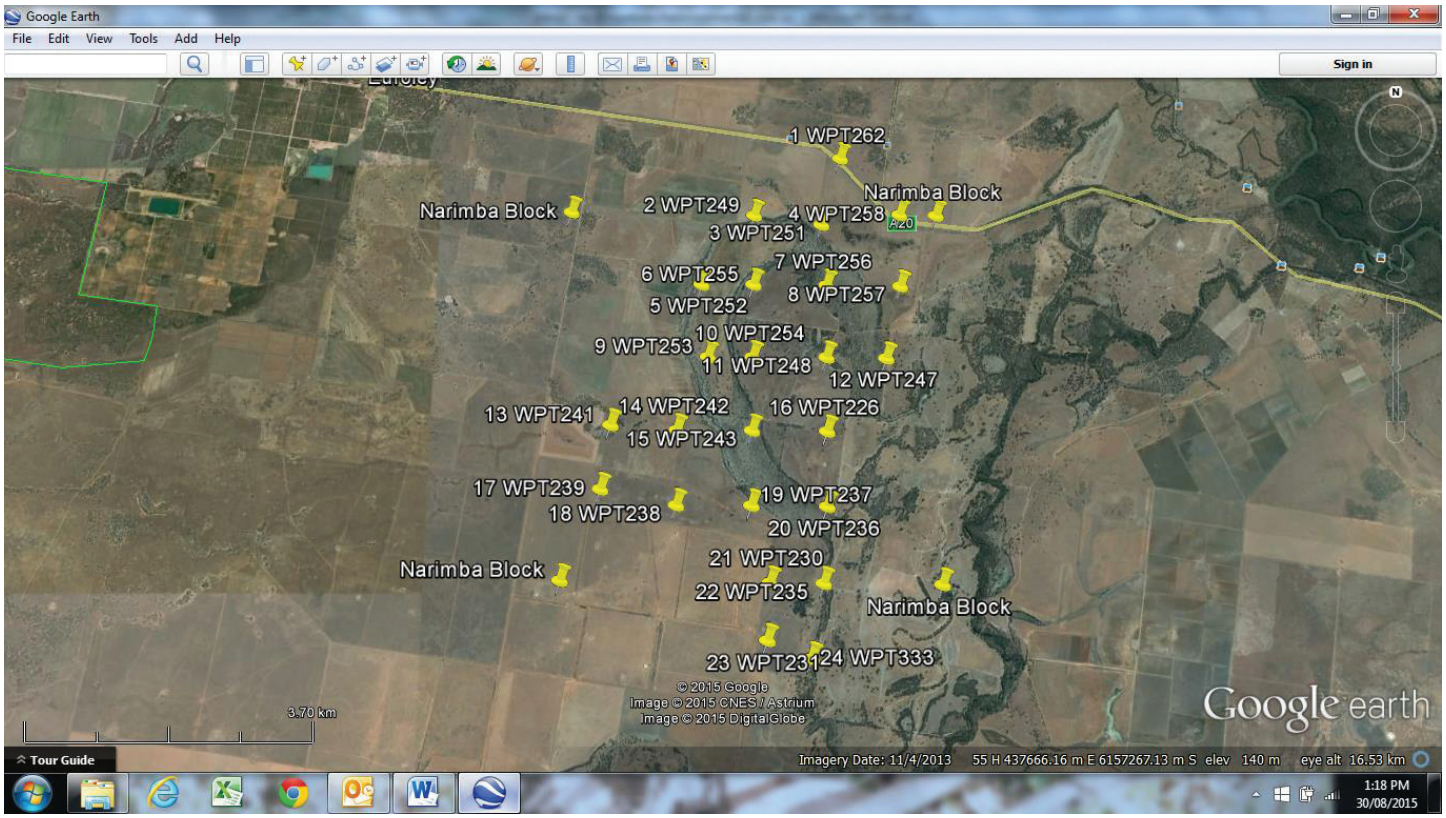
Above: Red kangaroo doe with joey in black box (*E. largiflorens*)/river red gum (*E. camaldulensis*) floodplain woodland at 'Narimba'. Photo: Ray Mjadwesch

Browning Strike Force camera, set to take time-lapse and motion activated images. Photo: Ray Mjadwesch

Ray Mjadwesh was awarded **2015 Australian Wildlife Society's Wildlife Ecology Science Research Scholarship** and was presented with a cheque for $5,000 by Patrick Medway, CEO of Australian Wildlife who sits on the judging panel.

no shooting, surrounding cropping and grazing properties are almost completely devoid of the animals.

Over the next six months sampled landscapes will include national parks and nature reserves, state forests, non-government sanctuaries and other private production systems through central and western New South Wales. This will complement the OEH Wildcount camera-trapping program that has been running in the east of the state since 2012, and providing a more complete picture of how the large macropod species continue to occupy landscapes across NSW than presently exists.



Narimba survey block (source: Google Earth)