



High hopes for

# Kalbarri wildlife

A recent wildlife survey has revealed that woylies and chuditch now appear to be thriving at Kalbarri National Park, an area from which they were once extinct.

by Brent Johnson and Peter Orell

The town of Kalbarri is a popular destination for holidaymakers. No visit to Kalbarri is complete without a trip to the famous Murchison River Gorge, some 30 kilometres to the east. This 80-kilometre stretch of river, within Kalbarri National Park, winds through etched cliffs of 400-million-year-old Tumblagooda Sandstone.

## Reintroductions

Wildlife once flourished throughout Kalbarri National Park but, in recent times, the invasion of introduced cats, foxes, pigs and goats has threatened native animals living in the park. The Chuditch Recovery Plan and the Department of Environment and Conservation's (DEC's), formerly CALM's, *Western Shield* program identified the park as a site that would be suitable for reintroducing selected native species once fox numbers were reduced.

Following three years of fox baiting in the park, an assessment of its effectiveness in reducing fox numbers was undertaken. This involved establishing wildlife monitoring sites and track count transects through a range of habitat types in the park. A variety of live traps were used to catch, identify and record a range of small mammals, amphibians and reptiles, while the track counts involved smoothing over many kilometres of sandy tracks and then returning in the morning to identify and count footprints. This provided information on the existing native species and introduced animal activity, and showed that several small mammals such as honey possums (*Tarsipes rostratus*) still occurred in the park and that fox activity was reduced by baiting.

The next stage was to reintroduce native mammals. The woylie (*Bettongia penicillata*) and chuditch (*Dasyurus geoffroyi*) were ideal candidates for reintroduction, as Kalbarri lies within their past distributions. Both had suffered significant population declines over the past 100 years and vast reductions in available suitable habitat. Considerable information was available from previous reintroductions of both species into other areas. In the case of the chuditch, the release of captive-bred individuals to a semi-arid site was seen as an



**Opposite page**  
**Main** Layered Tumblagooda Sandstone and river gums along the Murchison River in Kalbarri National Park.

Photo – Alex Bond

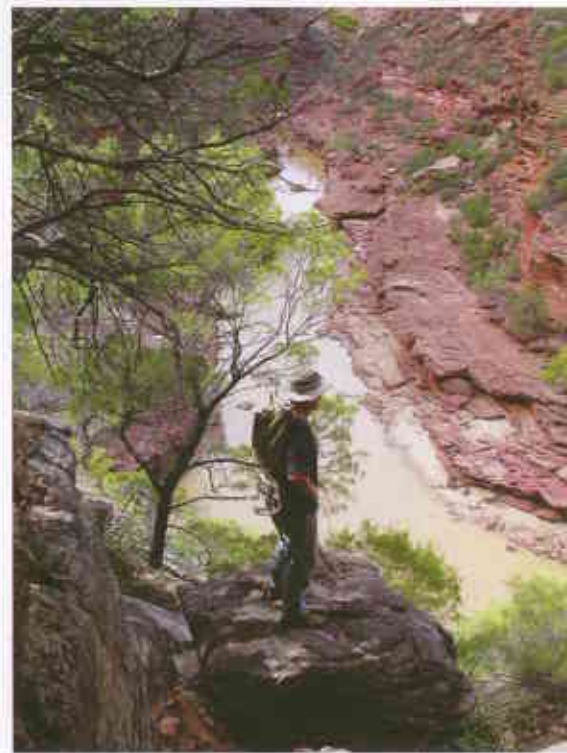
**Inset** Baby chuditch (left) and woylie (right).

Photos – Jiri Lochman

**Above** Lack of vehicle access to the Kalbarri National Park gorge meant that traps and other gear had to be carried in.

**Right** Brent Johnson scans the gorge for potential trapsites.

Photos – Lucie Southern



important step in the Chuditch Recovery Plan.

The first releases took place in 2000. A total of 113 woylies, sourced from areas in the south-west with good populations, were released in successive batches, with the latest animals coming from Karakamia Sanctuary (owned by the Australian Wildlife Conservancy) in September 2005. Forty nine chuditch, from a captive colony at Perth Zoo, arrived in two main batches, with the last being released in March 2001. Both species were monitored intensively for an initial period. Twice-yearly trapping has since been conducted by park staff, assisted by the Bush Rangers from Kalbarri District High School.

At first there was some doubt about the success of these reintroductions, as the difficult nature of the terrain and lack of track access made it hard to assess whether either species had persisted and established viable populations. Because the park is so vast, released animals can disperse over large areas. Occasionally,

however, individual animals were captured in the *Western Shield* traplines.

In March 2006, a more thorough survey was undertaken, and the findings were heartening. A team of Department of Environment and Conservation (then CALM) staff, volunteers and Green Corp workers combined to carry traps into both the rugged gorge terrain and the extremely dense and difficult-to-traverse vegetation on the sandplain to the south. The work in the gorges was further hindered by record floodwaters that had risen many metres above the normal river height. In fact, the floodwaters had even threatened the town of Kalbarri itself only a week before the visit.



### Wildlife revival

There were encouraging signs on the very first morning, as the gorge team completed the steep descent to the river. Several chuditch droppings were seen close together on a flat rock ledge. This latrine site indicated the presence of nearby chuditch and is also evidence of a type of territory marking that, while common with the closely related tiger quoll of the eastern states, is very rarely recorded in its Western Australian relative.

The team's efforts were rewarded

on the following three mornings with the capture of eight individual chuditch in the gorge and two chuditch and nine woylies in the sandplain heath and scrubland. The captured animals had an even male to female ratio, and were a range of ages. Some chuditch were recaptured several kilometres from the original trap site, indicating that they were able to quickly cover long distances through rugged terrain. None of the chuditch captured on this trip had been caught previously, a good indication that the population

is reproducing successfully. Seven of the nine woylies were individuals released in 2005 and all four females, including two new captures, were bearing pouch young. This was also encouraging, as it suggested that the animals were surviving well and reproducing successfully.

These two populations will continue to be monitored through DEC's *Western Shield* program, and further targeted surveys may be undertaken to complement the results of routine monitoring. With the positive results from the recent survey, it is also anticipated that other locally extinct mammal species will be reintroduced over the coming years. DEC hopes to reestablish both the black-flanked rock-wallaby and the tamar wallaby as iconic species in the park.

With the continuation of fox baiting and good wildlife management practices within the park it is possible that these two pioneer species will be at the forefront of a native wildlife revival at Kalbarri.



**Above** The rugged terrain meant that trapping along the gorge was exceptionally hard work.

*Photo – Lucie Southern*

**Above right** Volunteer Lucie Southern measures a captured chuditch.

*Photo – Brent Johnson/DEC*

**Left** Green Corp assistance was invaluable during the 2006 wildlife survey of Kalbarri National Park.

*Photo – Lucie Southern*

Brent Johnson is a Principal Technical Officer with DEC's Wildlife Research Centre, based at Woodvale. He can be contacted on (08) 9405 5106 or by email ([Brent.Johnson@dec.wa.gov.au](mailto:Brent.Johnson@dec.wa.gov.au)).

Peter Orell is Zoologist with the DEC's *Western Shield* program. He can be contacted on (08) 9334 0454 or via email ([Peter.Orell@dec.wa.gov.au](mailto:Peter.Orell@dec.wa.gov.au)).

Peter and Brent led the team that undertook the wildlife survey at Kalbarri earlier this year. They wish to thank Senior Ranger Mike Paxman and Kalbarri National Park staff for their assistance with many aspects of this wildlife recovery and monitoring program.

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Phone (08) 9334 0296 Fax (08) 9334 0432.

### Subscription enquiries

Phone (08) 9334 0481 or (08) 9334 0437.

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