

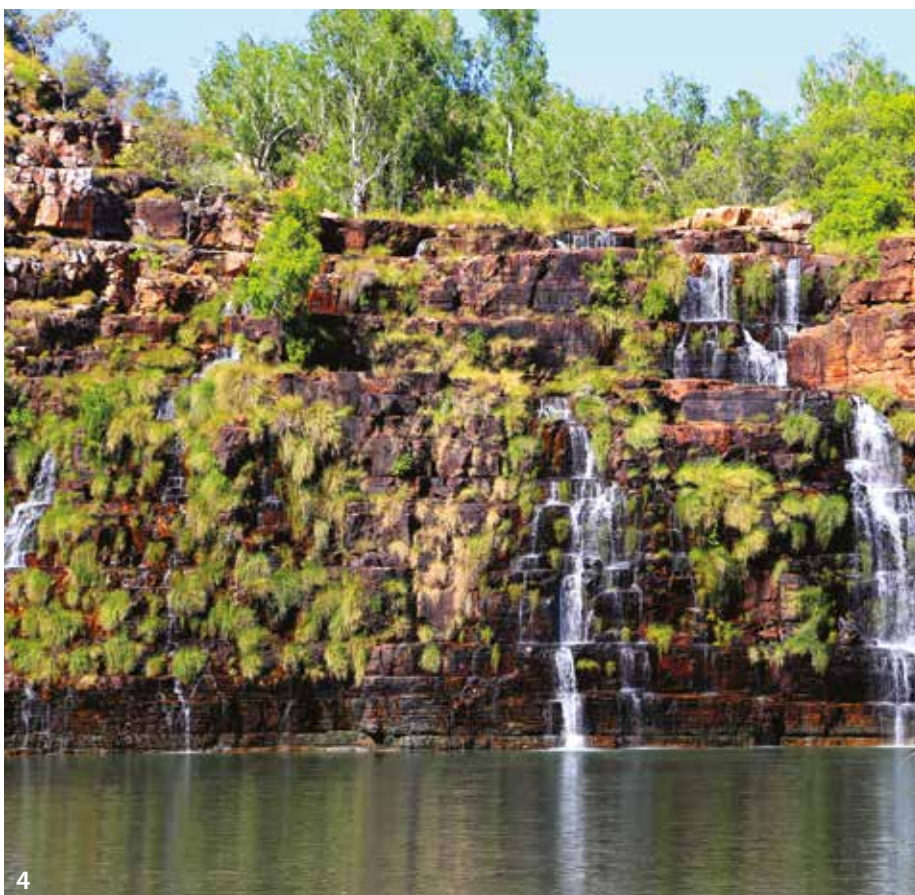
Biological surveys in Prince Regent National Park in August 2015 confirmed there were thriving groups of threatened mammals in the park, thanks to isolation and bushfire protection burns carried out under the *Kimberley Science and Conservation Strategy*.

by Ian Radford and Richard Fairman



MAMMALS THRIVING IN THE

PRINCE OF PARKS



Field trips to Prince Regent National Park provide a host of opportunities to gather vital information from a range of habitats. While the work is not all a walk in the park – with some logistical challenges – the spectacular scenery and opportunities for new discoveries more than make up for it.

SURVEY SITES

Mt Trafalgar and Cascade Creek were originally surveyed for mammals in 2003–04. Since monitoring under the *Kimberley Science and Conservation Strategy's* (KSCS's) Landscape Conservation Initiative started in 2011, Parks and Wildlife and its predecessors has resurveyed these sites three times – in August 2012, June 2014 and August 2015. For both the 2012 and 2014 surveys, department staff were joined by Dambimangari Rangers, the traditional owners of this magnificent country in the Kimberley. Parks and Wildlife and Dambimangari Aboriginal Corporation have collaborated on a number of Kimberley island and mainland biodiversity survey projects since the establishment of the KSCS.

Mt Trafalgar is a magnificent escarpment-bounded mountain at the northern coastal end of Prince Regent National Park, just north-east of the entrance to Prince Regent River. This sandstone cap overlies volcanic rocks, and is skirted by rainforest on the steep scree boulder slope at the base of the escarpment. The mountain provides a range of different types of habitat to look at threatened mammal abundance.

Main Prince Regent National Park.
 Photo – Adrian Barrett/*Parks and Wildlife*
This page 1 to 4: 1 Sugar glider. 2 Northern quoll. Photos – Jiri Lochman 3 The only way of reaching the remote Mt Trafalgar is by helicopter. Photo – Richard Fairman/*Parks and Wildlife* 4 Cascade Falls is popular among tourists. Photo – Carolyn Thomson-Dans/*Parks and Wildlife*



Left The colossal Mt Trafalgar looms out of the Kimberley landscape.

Photo – Adrian Barrett/Parks and Wildlife

Below Golden-backed tree rats were found at Cascade Creek.

Photo – David Bettini

“Given the importance of the area as a refuge for threatened mammals, introduction of a few smaller-scale prescribed fires would help protect the area against large-scale, high intensity damaging bushfires ...”

This part of the park can only be reached by helicopter, and is on a peninsula surrounded by sea or rugged sandstone which, along with active fire management by Parks and Wildlife, has kept this area almost entirely fire-free for eight years. Researchers believe it would be beneficial to maintain small patchy burns in the Trafalgar area (see also ‘Fighting fire with fire’ on page 10). Given the importance of the area as a refuge for threatened mammals, maintenance of a network of small-scale prescribed fires would help protect the area against large-scale, high intensity damaging bushfires in the late dry season that can result from human activities or lightning strikes.

The Cascade Creek survey sites are about 8km north-west of the famous Cascade Falls on Prince Regent River, perched on sandstone ridges and escarpment country above a rainforest-filled valley. Most Cascade Creek survey sites had been burnt earlier in 2015. The fires were patchy, with three of the eight sites (including the rainforest site) remaining unburnt. However, fire intensity ranged from moderate (2–5m scorch height) to high (complete canopy scorch) at the monitoring sites despite

being spatially patchy overall in this rocky landscape.

Despite below-average rainfall in the previous wet season, trap success rates at both sites were high, with the golden-backed tree rat, golden bandicoot, northern quoll (all three of these species are threatened), Kimberley rock rat, scaly-tailed possum and northern brown bandicoot all found at Cascade Creek, and the threatened brush-tailed rabbit-rat also captured at Mt Trafalgar.

There were also large numbers of common rock rats at Cascade and large numbers of pale field rats (*Rattus tunneyi*) at Trafalgar. Although common, these species are important indicators of ecosystem health, so the fact that they are present in high numbers is a good sign.

CANDID CAMERA

Parks and Wildlife researcher Richard Fairman intrepidly climbed down cliffs, up into trees and out into mangroves to set up remote cameras in some additional locations in an attempt to record animals that don’t usually enter traps.

The Kimberley sugar glider, a new animal for the park, was recorded by these cameras. According to the latest research

this is a new species which differs from both the eastern states sugar glider, and even from sugar gliders in the Northern Territory.

There are one or two mammals still missing from the species list within the KSCS monitoring program, most notably the black-footed tree-rat which has not been recorded in the Kimberley since 1987.

While we did not find a black-footed tree rat on this occasion, who knows what else will be uncovered using these camera traps in the future.



Ian Radford is Parks and Wildlife’s Kimberley regional fire ecologist and can be contacted on (08) 9168 4217 or by email (ian.radford@dpaw.wa.gov.au).

Richard Fairman is a Parks and Wildlife technical officer and can be contacted on (08) 9168 4239 or by email (richard.fairman@dpaw.wa.gov.au).