



COULD MAN'S BEST FRIEND

JOHN LAWSON and ROB MCLEAN

The Southwest corner of Western Australia is the last stronghold of the numbat, one of Australia's most endearing and endangered marsupials. Numbats originally ranged over much of the southern half of the continent. Their population has now dropped to less than 1,000 animals left in the wild (there are fewer numbats than giant pandas in the world). With the arrival of European settlement

and extensive land clearing plus the introduction of the European red fox, numbats disappeared over much of their range as the fox expanded into its habitat. By the early 1980s surveys had shown that the numbat could only be found in two small areas in Western Australia: Dryandra Woodland and Perup Nature Reserve. This beautiful little animal was actually on the brink of extinction.

Numbats feed exclusively on termites and are diurnal (active during the day), unlike most Australian mammals. They can be seen during the day as they search for the 20,000 termites they need to sustain themselves. It's a special thing when you watch as it frantically digs the termite galleries that crisscross the bushland floor, jumping logs, sniffing the ground, then breaking in and extending its



HELP SAVE THE NUMBAT

20cm tongue through the tunnels to catch these tasty insects (well that's what they think). It is the closest living relative to the Thylacine, the only member of the family Myrmecobiidae. It has more teeth than any other Australian terrestrial mammal (50 to 52), but it doesn't chew its food, it only uses them to modify nesting material. There are so many things that are unique about this little creature, and

yet the troubles it faces are unknown to many Australians.

Numbats are solitary animals and have a lifespan of up to six years in the wild. Females have home ranges of around 25 to 50 hectares; males can wander over much larger areas with a home range that overlaps that of several females. Numbats generally only come together during the breeding season, which is

in early January. A female only comes into oestrus for a 48-hour period. If she doesn't mate during this time, she may repeat this cycle in early February. If she does not find a male, then she must wait till the next season to produce young. After a 14-day gestation period, up to four young about the size of a rice

Above: Numbats enjoying the morning sun.
Photo: John Lawson



The numbat, also called the banded anteater, is a small endangered marsupial animal native to parts of Australia. They are under threat from habitat loss and introduced predators like foxes and feral cats. We need your help to protect the future of this unique marsupial. Photo: John Lawson

bubble are born. They then make their way up and attach themselves to one of four nipples which the female has in an underdeveloped pouch on her belly. Here, the young hold on until they are too large for the mother to carry around. She then deposits them in late July/early August in the burrow she has prepared with nesting material. The female leaves the burrow to feed daily,

returning late afternoon to suckle her babies throughout the night. As the young grow they become bolder, and start to emerge from their burrow in late August. At first, they stay close to the safety of their home, but progressively move further and start to explore the world around them, learning to feed for themselves. In November they leave the family burrow to set up territories

of their own. Young females breed in their first season, but young males will not become sexually mature until their second year. Their mother has invested ten months in raising her brood and must now start to prepare herself for the next breeding cycle. It's a busy life for a female numbat.

In the early 1980s when their numbers were critical, an intensive effort to bring numbats back from the brink of extinction was put in place by the Department of Conservation and Land Management of Western Australia (CALM – now Department of Parks & Wildlife - DPaW). A few numbats were taken to CALM's Woodvale complex, and here they were bred for the first time in captivity. A captive breeding program was set up at Perth Zoo in the early 1990s. Habitat loss and the European fox were identified to be the main threats to numbats in the wild, and an effort was made to develop control methods for these problems.

In the early 1990s, Operation Foxglove was born, and a fox baiting regime was set up. In 1996 this became the Western Shield Program that still runs to this day in many areas of Western Australia. After the initial success of



A numbat gathering nesting material. Photo: John Lawson

this program and improved control of the main predator, numbats made a comeback. By 1992 it was estimated that the numbers in Dryandra Woodland alone were between 500 and 800 individuals.

Reintroductions to former ranges began in 1985 with early success. Animals caught from the wild and later some individuals from Perth Zoo's breeding program were introduced to Boyagin, Tutanning and Dragon Rocks nature reserves and Batalling State Forest: populations are still present at all of those sites today. However, later reintroductions, to Cocanarup Timber Reserve, Stirling Range National Park, Mt Dale and Karroun Hill were not so successful, and those colonies are listed as either no longer present or status unknown. Numbats were also introduced to three fenced areas run by the Australian Wildlife Conservancy: Yookamurra, Scotia, and recently Mt Gibson sanctuaries. These feral free areas now account for around 30 percent of the total numbat population.

Around 2006 a worrying picture started to develop. Numbat numbers were crashing once more. By 2015 the population in Dryandra had dropped to

an estimated 50 animals. The bad times were back. With fox control in place, a new predator, the feral cat, had taken advantage and increased in numbers to become the main threat to numbats in the wild. Feral cats are much harder to control. They generally don't take baits and are notoriously hard to trap. Feral cats are implicated in the extinction of 27 Australian mammal species and are listed as the main threat to another 124 threatened species of mammals, frogs, birds, and reptiles. A 2013 study in Dryandra Woodland showed that feral cats are responsible for approximately 50 percent of numbat predation and foxes 17 percent, that's a staggering two-thirds of all numbat predation attributed to these two invasive predators.

This is where a small but dedicated group called the Numbat Task Force hopes to help, by raising funds for a Numbat Protection Dog. This project will be implemented and coordinated by Principal Research Scientist Dr Tony Friend of DPaW and the Numbat Recovery Team across all remaining numbat habitats in Western Australia and is supported by the Threatened Species Commissioner, Gregory Andrews. The group hopes to raise

around \$300,000 to run the project for at least two years. These funds would be used to employ a handler and two dogs to be used to locate the exact position of invasive predators so they can be removed humanely. If predation by feral cats and foxes can be reduced, it will significantly benefit numbat populations and give them a boost across their range. Removing feral cats and foxes will also have a positive effect on other threatened species that inhabit the same areas, such as woylies, chuditch, red-tailed phascogales, and malleefowl.

The Numbat Task Force hopes to raise these funds through Government and Conservation group grants and is now gearing up for a crowdfunding campaign to kick the project off. We hope for wide support for this innovative project.

The authors John Lawson and Rob McLean are two ordinary blokes with a passion for wildlife and a special soft spot for Western Australia's fauna emblem, the numbat.

The authors gratefully acknowledge that much of the information in this article has been provided through reference to Dr Tony Friend's extensive numbat research.



Numbats have a long sticky tongue that allows them pick up termites. Photo: John Lawson