The life and times of the northern hairy-nosed wombat

The northern hairy-nosed wombat (Lasiorhinus krefftii) is one of Australia's most mysterious animals. Only a hundred or so people have been lucky enough to see one in the wild, and there are none in captivity anywhere in the world.

Predator proof fence around Epping Forest.
Photo: Linda Dennis

In recent years, however, the northern hairy-nosed wombat has become just that little bit more known in Australia and around the world – but unfortunately for all the wrong reasons. It is Australia's second most endangered animal, the first being the Gilbert's potoroo of Western Australia.

The northern hairy-nosed wombat has the dubious honour of making it to more than one endangered listing:

- Endangered in Queensland under the Queensland Nature Conservation Act 1992
- Endangered nationally under the Commonwealth Environment Protection and Biodiversity Conservation Act 1999
- Critically Endangered internationally under the World Conservation Union's (IUCN) Redlist of Threatened Species, which lists species at a global level. (Department of Environment and Resource Management (DERM). In fact,

it makes it into the Top 10 of the world's most endangered animals.

Every two or so years a northern hairy-nosed hair census is carried out. Volunteers from all corners of Australia – and even the world – converge on Epping Forest National Park (Scientific) in central Queensland for two weeks to walk the length of the park, collecting wombat hair, measuring footprints and counting wombat poo.

The results of the 2007 hair census proclaimed that there are only 138 individuals left. Yes, you read that right – 138 northern hairy-nosed wombat individuals in the entire world. That's 13 times less than pandas!

But the fight is on to save this species from further decline.

The project to save the northern hairy-nosed wombat has been around for a long time, led by Dr Alan Horsup, Senior Conservation Officer with Queensland's Department of Environment and Resource Management. However, the last three years has seen a surge in activity after

Xstrata donated a massive \$3 million to assist in the translocation of some wombats from Epping Forest to the Richard Underwood Nature Refuge, near St George in southern Queensland to form a second colony.

A brief history of the northern hairy-nosed wombat

Fossil records show that the northern hairy-nosed wombat was once widespread, living in Victoria, New South Wales and Queensland (DERM). Since European settlement, however, the northern hairy-nosed wombat was known in only three locations: Epping Forest National Park in Central Queensland (where they can still be found), Deniliquin in New South Wales and the St George region in southern Queensland.

At the time of European settlement, the species already seemed to be uncommon. It is assumed that drought and grazing pressure from cattle and sheep accelerated the species' decline. It was extinct in the Deniliquin and St George areas by 1908.

What does the northern hairy-nosed wombat look like?

The northern hairy-nosed wombat is a heavily built animal with a broad head and a square-ish, fully furred nose. It has short legs and the feet are flat with strong, short claws. The front feet are built for digging burrows while the hind feet are longer and narrower and are used to shovel the dirt away.

The northern hairy-nosed wombat has soft grey-brown fur that can be softly mottled with brown or black. The length from its nose to its tiny little tail is around 1,020 millimetres and it can weigh up to 40 kilograms. Males are slightly larger than females.

What is the habitat of the northern hairy-nosed wombat?

Epping Forest National Park is semiarid and dominated by brigalow (*Acacia harpophylla*) and gidgee (*Acacia cambagei*) on heavy grey, non-cracking soils. Deep alluvial sand deposits are present along an ancient watercourse, on the banks of which the wombats dig burrows. Wombat habitat is dominated by long-fruited bloodwood (*Corymbia clarksoniana*), Moreton Bay ash (*Corymbia tessellaris*) and Bauhinia (*Lysiphyllum hookeri*), with a grassy ground cover.



The burrow of a northern hairy-nosed wombat. Photo: DERM

Habitat at the Richard Underwood Nature Refuge has open woodland, dominated by *Eucalyptus melanophloia* with other canopy species such as *Corymbia tessellaris, Corymbia clarksoniana* and *Angophora melanoxylon* and there is the occasional stand of *Callitris glaucophylla*. The shrub layer is sparse. The grassy ground cover is mostly common native grass which is thought to be *Thyridolepis mitchelliana*, however *Pennisetum ciliare* (buffel grass) is dominate in the ground layer. Soils are mainly red loamy sand.

What is the behaviour of the northern hairy-nosed wombat?

The northern hairy-nosed wombat spends its day much like its cousin, the bare-nosed wombat. Long hours are



Hair Census team at the entrance of a northern hairy-nosed wombat burrow. Photo: Dr Alan Horsup

spent underground in a temperature controlled burrow, as the wombat cannot tolerate high temperatures. During long summer days, the wombat sleeps deep underground, emerging in the evening as temperatures cool to graze on grass. In the cooler months the wombat emerges earlier and may be seen sunning itself just outside the burrow entrance in the late afternoon.

Interestingly, the southern hairy-nosed wombat (the northern hairy-nosed wombat's closest relative) seems to have better temperature control and is often seen out of the burrow during the day time in temperatures as high as the low 30's (Celsius).

When does the northern hairy-nosed wombat breed?

Due to the elusiveness of the northern hairy-nosed wombat, information on breeding is vague and most information is gained from research carried out on the southern hairy-nosed wombat.



Epping Forest. Photo: Linda Dennis



Northern hairy-nosed wombat translocated to Richard Underwood Nature Reserve. Photo: DERM



Richard Underwood Nature Reserve. Photo: DERM



Sunset at Richard Underwood Nature Reserve. Photo: DERM



Wombat droppings. Photo: DERM

Wombats breed roughly every two to three years. Northern hairy-nosed wombat young are born in spring and summer – the wet season - and spend around ten to eleven months in the pouch. Young stay at heal until they are approximately 18 months of age.

It is thought that female young disperse from the mother's area to find a new territory, while males are tolerated and stay in the area for longer.

Threats for the northern hairy-nosed wombat

Competition with cattle and sheep, particularly during droughts, appears to have been the main factor contributing to the species' major decline around the time of European settlement.

Cattle have been removed from Epping Forest National Park, so grazing pressure from livestock is no longer considered a threat in the region.

In 2000 a pack of wild dogs entered the park - which was gazetted in 1971 - and killed at least nine wombats. In 2002 a predator proof fence was erected around the entire park to ensure that this never happened again. This will also ensure that wombats don't venture off the park to unsuitable or unstable habitats (DERM).

The Wildlife Preservation Society of Australia contributed funds to this program to provide security for the remaining wombats.

Current threatening processes are: loss of genetic diversity; small population size; disease and parasites affecting the health of the animals; wildfire and drought destroying food sources; and competition for food from eastern grey kangaroos (*Macropus giganteus*), especially during drought periods.

Conservation efforts for the northern hairy-nosed wombat

There is so much being done and already there have been major successes in the conservation of the northern hairy-nosed wombat.

After the wild dog attack, when a number of wombats were lost, there has been a slow but steady gain in numbers.

According to Dr Alan Horsup, in the mid 8o's there were only believed to be

around 35 individuals left, all located within the Epping Forest National Park. The mid 90's saw an increase to 65 wombats, but the population was dominated by older individuals with males outnumbering females two to one. The first Hair Census in 2002 determined that there were 113 individuals, but not long after a pack of wild dogs invaded the park and at least nine wombats were lost. Thankfully, the number then increased to 138 in 2007 with a much healthier sex ratio, near even. A Hair Census was conducted in 2010, the results are currently being analysed.

This progressive increase is the result of numerous tasks within the northern hairy-nosed wombat recovery project.

As stated previously, in 2002 a predator proof fence was erected and 2005 saw the installation of a nine kilometre water pipeline with 15 automatic water points, along with feed stations dotted throughout the wombats range. Ongoing management of pasture in the park has also proven beneficial.

A caretaker program was established, where volunteers spend a month at a time at Epping Forest keeping an eye open for wombat mishap, collecting daily photo and video footage from the night vision cameras installed and generally maintaining the park and its infrastructure.

In July 2009 the first northern hairynosed wombats were captured and translocated by aircraft to a new location, the Richard Underwood Nature Refuge near St George in Queensland. Over five trapping sessions between 2009 and 2010 managed by Dave Harper, Principal Project Officer with the Department of Environment and Resource Management - saw a total of 15 wombats moved. (Harper).

Sadly there were some losses, which can be expected in any radical translocation such as this. There are now 11 wombats at the reserve and, from video footage, it would appear that they are doing very well. Recent footage has revealed that there are two pouch young in the colony, which is a fabulous success to the project.



Hair Census 2007 volunteers processing collected hair. Photo: Linda Dennis



Bones of a northern hairy-nosed wombat. Photo: Linda Dennis