



National Environmental  
Research Program

NORTHERN AUSTRALIA HUB

*Improving biodiversity  
conservation in  
northern Australia*

# Bringing Mammals Back

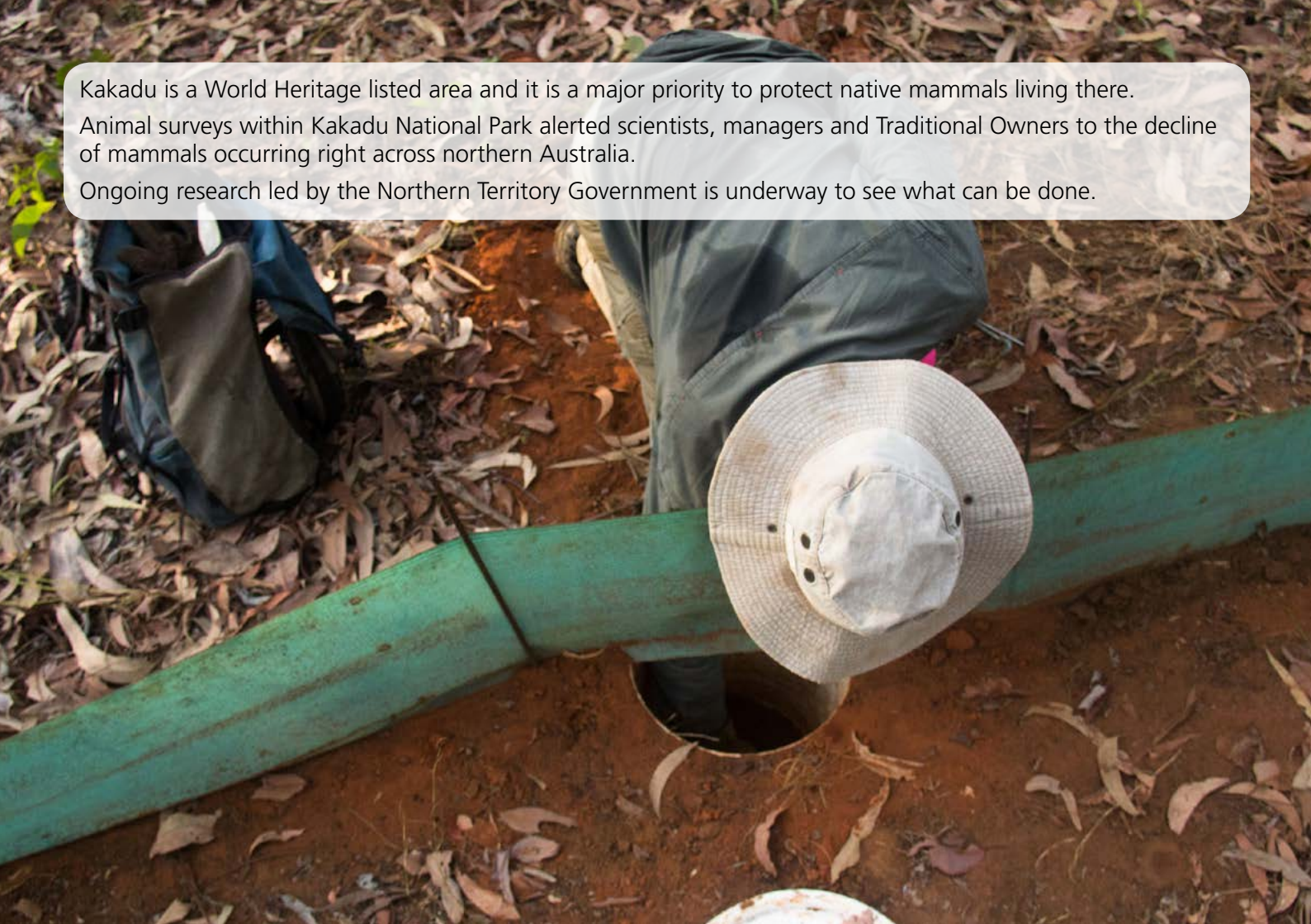
Investigating the role of feral cat predation  
on native mammal decline using cat-proof fencing



PROJECT UPDATE | 2014



Kakadu is a World Heritage listed area and it is a major priority to protect native mammals living there. Animal surveys within Kakadu National Park alerted scientists, managers and Traditional Owners to the decline of mammals occurring right across northern Australia. Ongoing research led by the Northern Territory Government is underway to see what can be done.



# We know that native mammals are disappearing from country all across the Top End

You have been telling us

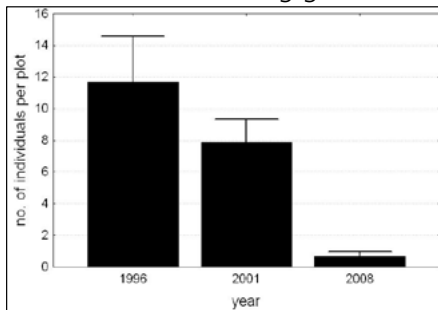


And helping us look for them

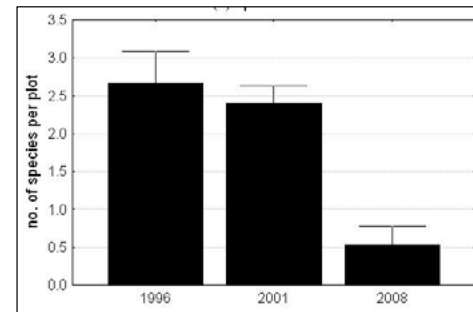


But the numbers aren't looking good

Photos: Carol Palmer



Total number of mammals caught in 1996, 2001 and 2008



Number of different kinds of mammals caught in 1996, 2001 and 2008



## There are a number of related things that affect mammals



**Less food  
Less places to live**

Photos: Weeds - Jeremy Garnett , Horses - Kakadu National Park, Buffalo - Stuart Blanch, Fire - CSIRO Darwin, Cows - Alaric Fisher, Donkeys and Pig - Kakadu National Park

= more risk from



Disease – some work has been done on disease.

Predation by cats - we don't know much about cats in the Top End.



Toads - not all of the declining mammals can be hurt by toads.

Photos: Disease - DLRM, Cat - Tony Buckmaster, Cane Toad - Lindley McKay

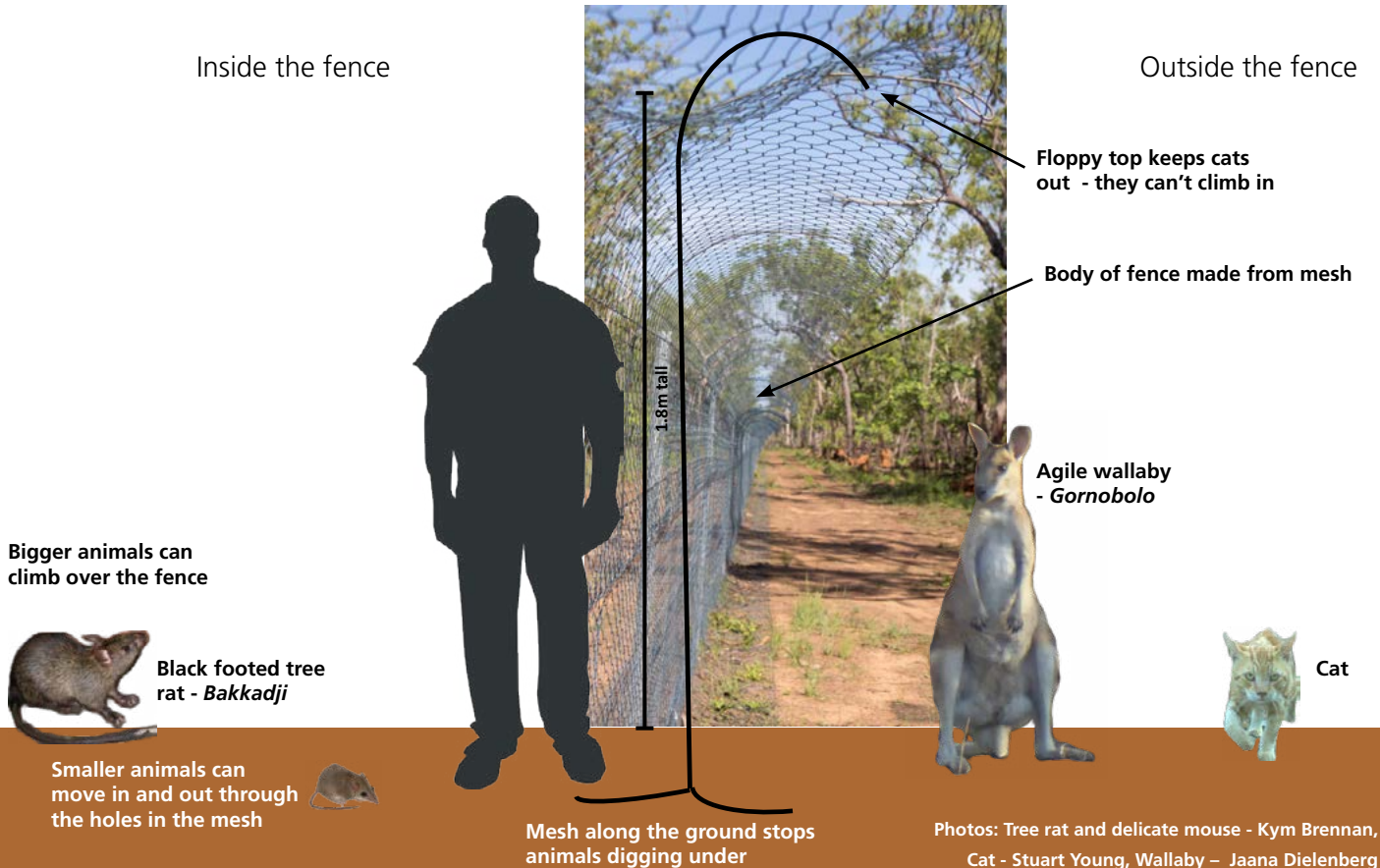


## We know cats eat Top End mammals

Not much work has been done on cats in the Top End. We wanted to test if mammals will do better without cats or fire. In Kakadu, we put fences around two areas and took out cats. We are keeping fire away from the fenced areas. We will see if mammals do better in these areas.



# How the fence works



Photos: Tree rat and delicate mouse - Kym Brennan, Cat - Stuart Young, Wallaby – Jaana Dielenberg



## We finished building the cat proof fence at Kakadu



These are the volunteers who helped drive wallabies out of the fenced area before we locked the gate



## Making sure the fence is good

Fence checks are done every week.

Problems are fixed.

Burning is done around the fences and the no burn sites to stop fire getting in.

If the fences are no good the project won't work.



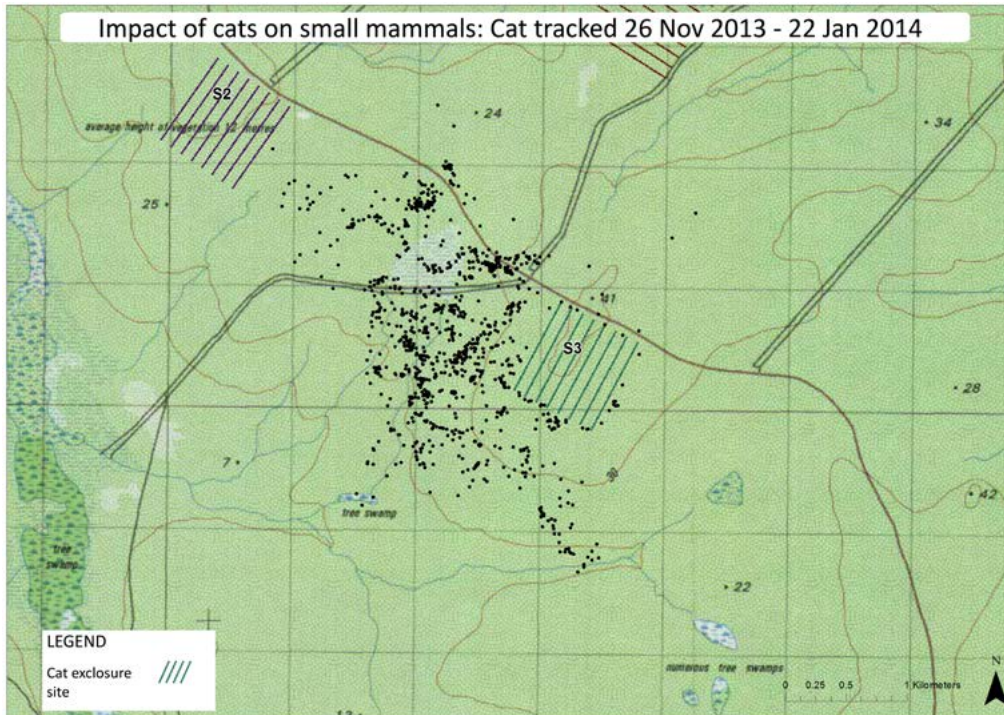
If a tree falls on a fence we remove it and fix the fence as soon as possible



## We got rid of the cats from the inside

One cat was living in the area where we built a fence.

We caught the cat and put it outside with a collar on it to follow where it went – each dot on the map is one position. The striped squares are the fenced areas. We can see that the fence is working, the cat goes around the outside but does not get in.



## Keeping an eye on the inside

We have camera traps set around the fence to make sure there are no cats or dogs inside.

Camera traps tell us there are at least two cats in the area outside of the fences – one is the one we radio collared.



## Monitoring the sites

Six sites have been set up in the Kapalga area, in Kakadu.

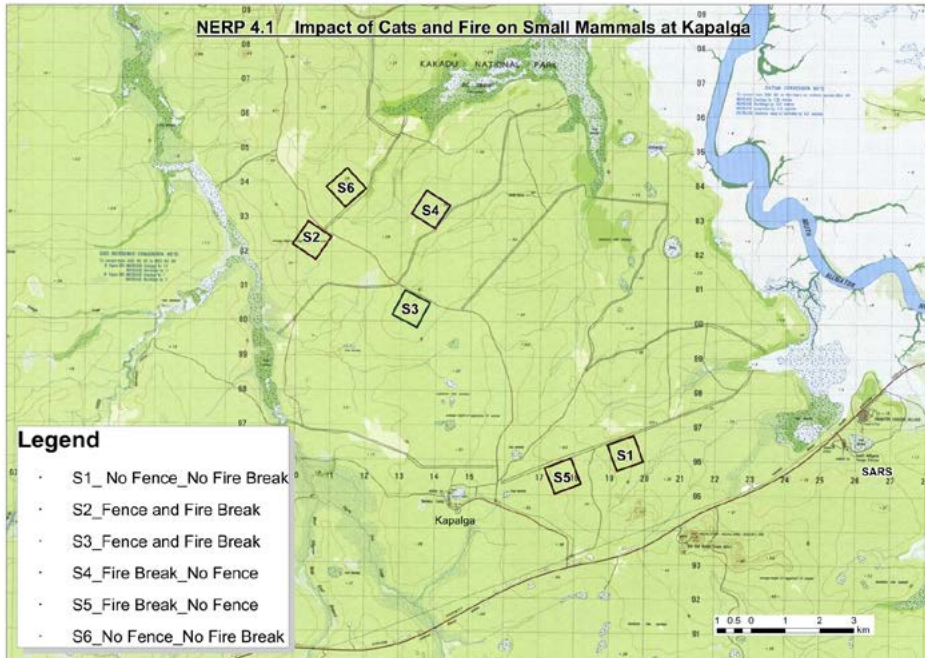
Two with fences to keep cats out and a fire break to keep out fire.

Two have fire breaks but no fence so cats can go there but there is no burning.

Two have no fire break and no fence – so animals can move in and out.

We trapped animals at these sites once before the fence was built and once after.

We will trap two more times before the project is finished.



We are using cages, Elliot traps, camera traps and pitfall traps to see what animals are in the area.

It is too early to tell whether removing cats has been good for the animals inside the fence.

Unfortunately the sites do not have very many mammals, but we are catching a few reptiles.

It may take a few more years for us to see an improvement in the number of mammals.

We have caught some quolls and other mammals at one of the sites outside the fence – good news they have not been poisoned by cane toads.



## Other mammal work

All mammals have been checked for a number of diseases to rule out disease as a cause of mammal decline.



## What next?

The project funding finishes in April 2015, however we don't expect clear results by 2015 and would like to continue for a few more years.

We are waiting for news on how the Australian Government will fund threatened species projects and whether we can get more funding for this project.

For the fence to stay predator proof it requires ongoing monitoring and maintenance.



Melomys - *Mulbbu*



Northern Territory Government Flora and Fauna scientists are working with Kakadu National Park and Traditional Owners to find out what is happening to the animals, so that we can do something about it.



Northern brown bandicoot - *Yok*



Northern  
Territory  
Government

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For more information on the Northern Australia Hub of the National Environmental Research Program go to [www.nerpnorthern.edu.au](http://www.nerpnorthern.edu.au)



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