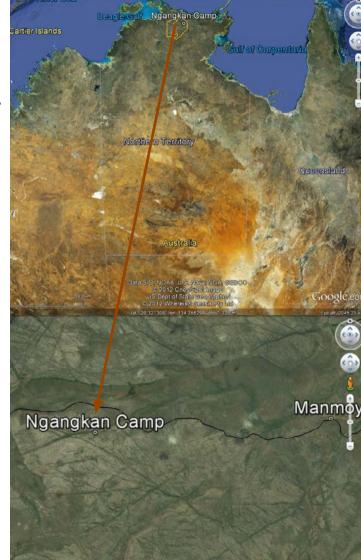


Where and Why?

Our camp was on Ngangkan in Ngolkwarre country, in the Warddeken IPA on the western Arnhem Plateau, Northern Territory.

The elders chose Ngangkan for the families to camp because it is a peaceful place, away from town, with lots of bush tucker; a place to bring back memories to share and a place for kids to learn about cultural knowledge.

Warddeken Indigenous Protected Area is funded to look after the country and its animals. Every year, the Warddeken rangers do surveys to look for animals and to build up a picture of what is happening with the animals over time. Surveys have been done at Ngangkan since 2012 and the same sites are visited each year to see if the animal numbers are changing. It is planned to use Ngangkan as a long term monitoring site to keep a check on animal numbers in Warddeken IPA.



Who was there?

- Rangers and Traditional Owners of the Warddeken IPA from the Manmoyi and Kamarrkawarn ranger bases, with their families and lots of kids as it was the school holidays
- Scientists Alys Stevens and Terry Mahney from Flora and Fauna Division (NT Govt)
- Manmoyi Outstation school teacher Dan McLaren
- Volunteer Doctor Gabby Hall
- Georgia Vallance Warddeken Coordinator



What we did

Cultural activities

Cultural activities included; gathering (bushtucker, cultural materials like pandanas, digging sticks), knowledge sharing in evenings, corroboree with singing and dancing, traditional cooking, making music with traditional instruments and knowledge sharing everyday as part of life.

Berribob taught the boys and young men how to make shovel spears, spear throwers and make fire in preparation for a fire drive to hunt kangaroo. It had been a long time since there had been a fire drive. The older men spoke to the boys about how to do a fire drive and why it was important. At the end of the camp the older men led the boys and young men on a fire drive.

The older women taught girls and young women about all the activities women do to support the fire drive. This included making string that is woven to make string for binding the spear tips and making string bags, weaving pandanus to make baskets, collecting and cooking yams to eat with the kangaroo.





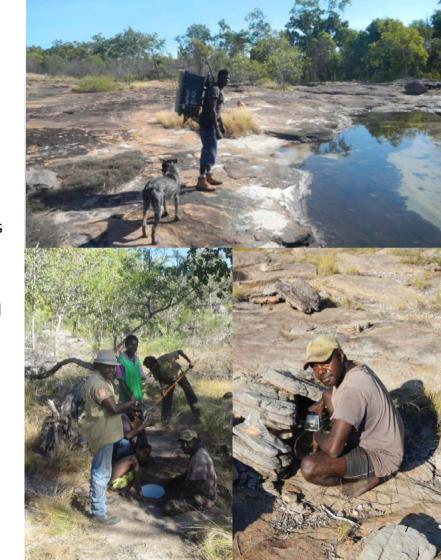


What we did

Animal survey

With the help of Alys and Terry, we did an animal survey putting 5 different kinds of traps (cage, elliot, pitfall, funnel and motion sensor cameras) in 10 sites. In 2012 we put out traps at 18 sites. This year we put traps at the 10 sites that caught the most animals in 2012.

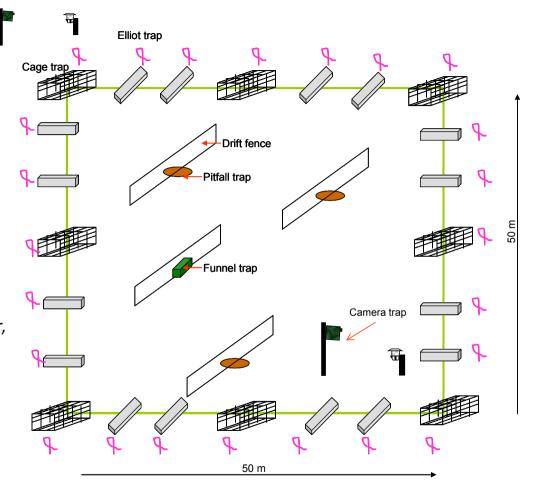
We left the traps out for 4 days, checked them for animals each morning and put fresh peanut butter, rolled oats and honey bait in them each afternoon.





How we put our traps out

Traps were put out for 4 nights. We check our traps every morning and then close up the cage and Elliot traps. We check our pitfalls throughout the day, and then reopen the cage and Elliot traps in the late afternoon and put fresh peanut butter, rolled oats and honey bait in them.



What we did

Spotlighting

On two nights we did a 3 kilometre spotlight walk. The purpose of this was to see what animals we could find that were out at night that we might not catch in the traps.

The other reason for spotlighting was to look for feral cats. This is part of a project to find out more about what feral cats are doing in Arnhemland including how many of them there are and where they are.

As well as spotlighting for them on foot, we also spotlight for them from vehicles and do long walks recording where we find feral cat traps in the sand. This all helps to build up a picture of where cats are, how many of them there are and what they are doing.



What did we find?

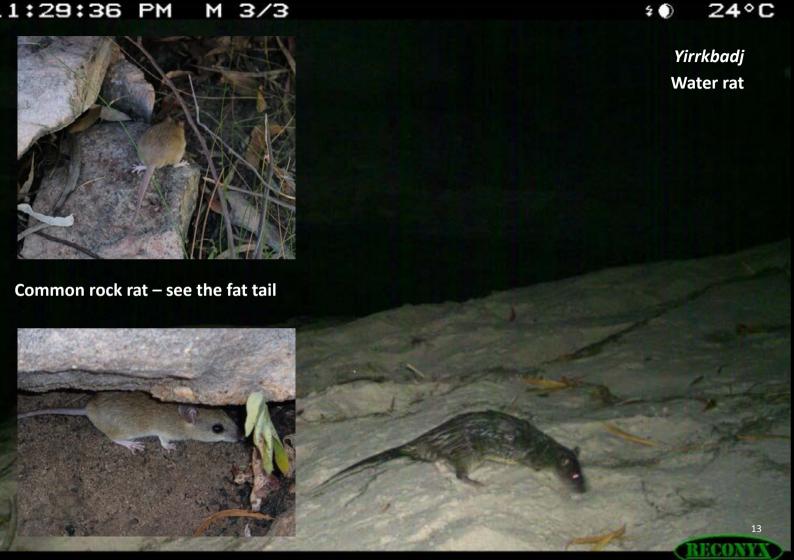
We found 36 different mammal, reptile and frog species. For a full list, please see the end of the report. This included 21 different reptiles, 7 frogs, 6 native mammals and 2 feral mammals. In 2012, at the same sites, we found 18 different reptiles, 1 frog, 5 native mammals and 3 feral animals.

Survey highlights included catching three sandstone antechinus and finding, for the second year, *Alwalngurru* (chameleon dragons, *Chelosania brunnea*) These are a totemic and culturally important species rarely seen in over twenty years.

We also found *Yirlin-kirrk-kirr*, white-throated grasswren, at or near two of the sites. These birds like places with lots of old spinifex grass that doesn't get burnt too often. Finding them in this place two years in a row shows the fire management here must be good for them. It will be interesting to see if they are still there next year because the fire drive was done in the area where one family of these birds were seen.







What did we find spotlighting?

Spotlighting was an important way of finding out what animals were present that we might not have caught in the traps or on camera. In total we found 12 different animals that we didn't find in the traps.

This included:

- 2 feral cats
- Danngarr (frill-necked lizard)
- *Mod* Children's python
- 4 different belerrk (geckos)
- 3 different *djaddi* (frogs).

Dan shot one of the cats and we brought it back to see what it had been eating. When we cut it open and looked in its stomach we found that it was full of grey fur. It had been eating small mammals.

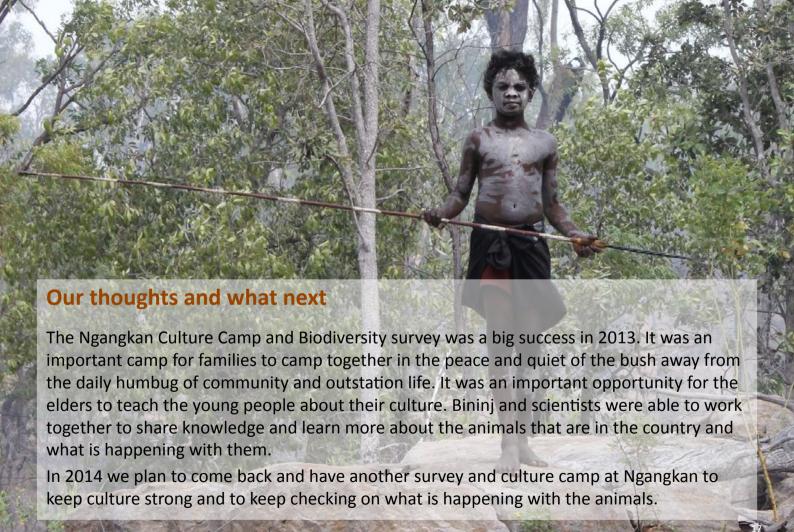




Species list

This is a list of all the animals we found during the Ngangkan Survey in 2013. It includes animals caught in traps, seen during searches or spotlights and animal tracks and droppings. Animals in red are feral animals.

GROUP	SPECIES	COMMON NAME	GROUP	SPECIES	COMMON NAME
			Reptile	Gehyra nana	Northern Spotted Rock Dtella
Frog	Crinia bilingua	Bilingual Froglet		Gehyra pamela	Arnhem Land Spotted Dtella
	Limnodynastes lignarius	Carpenter Frog		Heteronotia planiceps	North-west Prickly Gecko
	Litoria bicolor	Northern Dwarf Tree-frog		Lucasium stenodactylum	Crowned Gecko
	Litoria caerulea	Green Tree-frog		Morethia storri	
	Litoria meiriana	Rockhole Frog			Storr's Snake-Eyed Skink
	Litoria wotjulumensis	Wotjulum Frog		Notoscincus ornatus	Ornate Snake-Eyed Skink
	Uperoleia arenicola	Jabiru Toadlet		Proablepharus tenuis	Slender Snake-Eyed Skink
	Uperoleia sp.	Toadlet		Pseudonaja nuchalis	Western Brown-Snake
Reptile	Carlia amax	Two-Spined Rainbow Skink		Pseudothecadactylus lindneri	Giant Cave Gecko
Repuie				Strophurus ciliaris	Spiny-tailed Gecko
	Carlia gracilis	Slender Rainbow Skink		Varanus baritji	Black-spotted Spiny-tailed Monitor
	Chelosania brunnea	Chameleon Dragon	Mammal	Bubalus bubalis	Swamp Buffalo
	Chlamydosaurus kingii	Frilled Lizard	Wallillai		
	Cryptoblepharus cygnatus	Swanson's Snake-eyed Skink		Felis catus	Cat
	Ctenophorus caudicinctus	Ring-tailed Dragon		Hydromys chrysogaster	Water-rat
	Ctenotus coggeri	Cogger's Ctenotus		Macropus bernardus	Black Wallaroo
	Ctenotus inornatus	Plain Ctenotus		Melomys burtoni	Grassland Melomys
	Ctenotus quirinus	Arnhem Land Ctenotus2		Pseudantechinus bilarni	Sandstone Antechinus
	·			Tachyglossus aculeatus	Echidna
	Ctenotus vertebralis	Scant-Striped Ctenotus		Zyzomys argurus	Common Rock-rat
	Diporiphora bilineata	Two-Lined Dragon		Zyzonnys argurus	Common Nock-rat



Acknowledgements

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For more information regarding the Warddeken Indigenous Protected Area contact operations@warddeken.org.au

Technical and scientific support for the survey was provided by Alys Stevens and Terry Mahney from the Flora and Fauna Division of the Northern Territory Government. For any further technical information, please contact Alys Stevens on alys.stevens@nt.gov.au or Terry Mahney on terry.mahney@nt.gov.au





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For more information on the Northern Australia hub of the National Environmental Research Program go to

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