

# Warddeken Camera Trap Results 2013



# Introduction

Warddeken Indigenous Rangers have been working together with scientists from the Northern Territory Government on a project that is part of the National Environmental Research Program.

Together we are looking at better ways to monitor terrestrial animals and also at the impact of feral cats. One part of the research has been looking at the effectiveness and practicality of using motion sensor cameras as a terrestrial monitoring technique.

We have been putting out camera traps at the same time as using more traditional monitoring techniques like Elliot traps and pitfall traps, to see how they compare. We are also testing the best way to set up the cameras. For example, how many to use, where to place them and what bait to use.

Initial results are very promising, with camera traps even detecting some species that were not picked up by the other trapping methods. Camera traps also offer the advantage of being far less resource and labour intensive than elliot and pitfall trap methods. In addition camera traps are more suitable for use by rangers without support by trained ecologists.

This report presents a list of species recorded at different sites using two different methods. The first part of the report shows the results of a trial to detect cats using just one camera at each site and testing a variety of different baits and lures to attract cats.

The second part of the report shows the results of a trial to detect both native mammals and feral cats using 5 cameras at each site (a 50 metre x 50 metre quadrat) with standard small mammal bait (honey, rolled oats and peanut butter). The report shows a small selection of the more interesting photos from the many thousands that we have recorded.

So far we have found that the type of bait or lure makes very little difference to attracting cats and that we record more cats using 5 cameras at a site with just standard bait than we do using one camera with different bait and lure types. However we still have more work to do in testing the different methods before this project is finished.

# **Camera Trial May/June 2013**

In this trial we tried using dry cat food and dried liver for some sites and pongo (cat smell) for other sites.

We also put some cameras in open areas and others in narrow areas, such as creeks or between rocks.

We wanted to see what bait and what type of places were best for finding cats.

In total 2 feral cats, 4 feral animal species, 3 native mammal species and 10 bird species were recorded from 23 sites.

# Site CAT21 - Camera N1

Species List:Dingo - DalkkenPigBuffalo - NganabbarruCrow - Wak



# Site CAT20 - Camera N6

**Species List:** Black wallaroo (male) - *Barrk* 

2013-06-02 12:13:32 AM

# HC600 COVERT

M 1/3

# Black wallaroo (male) - Barrk

25°C

20

# Site CAT26 - Camera N7

**Species List:** Feral cat - ginger Buffalo - *Nganabbarru* 



HEGOO COVERT

HCGOO COVERT

HCBOO COVERT

# Site CAT06 - Camera W13

**Species List:** Crow - Wak

Peaceful dove - Korlobok

Buffalo - Nganabbarru

# 2013-05-01 8:41:29 AM M 4/5 27°C Peaceful dove - Korlobok

HC600 COVERT

# Site CAT13 - Camera N9

**Species List:** Buffalo - Nganabbarru Crow - Wak Dingo - Dalkken Rainbow skink - Burndjingh

#### 2013-06-02 9:58:53 AM М 2/3



# Ngangkan creek - Site CAT05 - Camera W5

Species List: Whistling kite - Marram

Buffalo - Nganabbarru

Crow - Wak

#### 2013-05-03 4:03:51 PM 3/3 м

31°C C) Whistling kite - Marram HC600 COVERT

Ngangkan creek - Site CAT05 - Camera W5



# Site CAT09 - Camera W7

Species List: Agile wallaby - Kornobolo Bar-shouldered dove

Pig

Crow - Wak

Straw-necked ibis



Site CAT09 - Camera W7



# Site CAT21 - Camera W16

Species List: Pig

White-faced heron - Naburrma

Partridge pigeon - Rakul



# Site CAT21 - Camera W16



# Manmoyih - Site CAT01 - Camera W18

Species List: Agile wallaby - Kornobolo Dingo - Dalkken Camp dog Crow - Wak



Milo steals the bait!

# Ngangkan spring - Site CAT07 - Camera W22

**Species List:** Black wallaroo - *Barrk* 

Crow - Wak



# Site CAT07 - Camera W26

Species List:Buffalo - NganabbarruStrawBush stone curlew - KurruwirlikCrowBrown goshawkCrow

Straw-necked ibis Crow - *Wak* 

## 2013-05-10 9:43:26 PM M 3/3



# Bulyim - Site CAT13 - Camera W28

**Species List:** Crow - Wak Agile wallaby - Kornobolo Straw-necked ibis Buffalo - Nganabbarru



# Site CAT03 - Camera W24

Species List: Crow - Wak Common bronzewing pigeon Agile wallaby - Kornobolo Dingo - Dalkken Camp dog Buffalo - Nganabbarru



# Site CAT03 - Camera W24





Dingo - *Dalkken* 

# Mirelk - Site CAT24 - Camera W27

Species list: Feral cat Pig Buffalo - Nganabbarru Crow - Wak



These sites either had no photos or the photos were no different from those already in the report.

# Yenamaraway - Site CAT15 - Camera N8

**Species List:** Crow - Wak

# Bukbuk - Site CAT16 - Camera N2

No animals seen on camera

# Site CAT19 - Camera N4

Species List: Crow - Wak Buffalo - Nganabbarru Pig

# Site CAT10 - Camera W8

Species List: Dingo - Dalkken

# Site CAT04 - W14

Species List: Dingo - Dalkken

# Site Cat18 - Camera W17

No photos

# Site CAT25 - Camera W20

Species List: Dingo - Dalkken

# Site CAT02 - Camera W21

Species List: Crow - Wak Agile wallaby - Kornobolo Dingo - Dalkken

# Site CAT11 - Camera W23

Species List: Crow - Wak Dingo - Dalkken

# Mirelk - Site Cat27 - Camera W25

Species List: Dingo - Dalkken Buffalo - Nganabbarru

# **Milerrelerre Camera Trap Results**

In this trial we put out 5 cameras at each site all with peanut butter mix for bait. This was to see if using 5 cameras at a survey site increased the number of small mammals and feral cats we found. In total we recorded 6 feral cats, 5 feral animal species, 9 native mammal species, 18 bird species and 2 reptile species from 12 sites using 58 cameras.

# Yenamaraway - Site KAM01 - Camera RW01, RW26, W14, W18, W23

Species List: Echidna - Ngarrbek Water rat - Yirrkbadj Black wallaroo - Barrk Feral cat Camp dog Dingo - Dalkken Pig Buffalo - Nganabbarru Straw-necked ibis Crow - Wak

# Yenamaraway - Site KAM01 - Camera RW01, RW26, W14, W18, W23



Feral cat

# Yenamaraway - Site KAM01 - Camera RW01, RW26, W14, W18, W23

29°C

2013-08-09 4:56:05 PM N 1/3



29°C





One Sock was here for 2.5 hours waiting for someone to come back

# Yenamaraway - Site KAM01 - Camera RW01, RW26, W14, W18, W23





# Ngoroloh - Site KAM03 - Camera RW03, RW19, W20, W24, W25

Species List: Dingo - Dalkken Grey-crowned babbler - *Ngangangh-ngangangh* Bar-shouldered dove Feral cat Camp dog Magpie lark - Borliblib Buffalo - Nganabbarru Crow - Wak Straw-necked ibis Cane toad

#### 2013-08-18 3:46:47 AM M 2/3



# Ngoroloh - Site KAM03 - Camera RW03, RW19, W20, W24, W25



WARDDEKEN25

**Bar-shouldered dove** 

# Ngoroloh - Site KAM03 - Camera RW03, RW19, W20, W24, W25

Grey-crowned babbler - 2013-08-28 8:05:02 AM M 3/3 Ngangangh-ngangangh



2013-09-05 10:26:31 AM M 1/3



Magpie lark - Borliblib

WARDDEKEN20

# Mekokduberrk - Site KAM05 - Cameras RC20, RC23, RC25, RW02, RW23



# Mekokduberrk - Site KAM05 - Cameras RC20, RC23, RC25, RW02, RW23

Diamond dove and Peaceful dove - Korlobok

# Mekokduberrk - Site KAM05 - Cameras RC20, RC23, RC25, RW02, RW23

2013-08-16 11:00:13 PM M 2/3

Feral cat (tail only)

1 -

Euro - Kalkberd

PC850 PROFESSIONAL

# Kordomkordom - Site KAM07 - Camera RC01, RC42, RC44, RW58, RW61

**Species List:** Bush stone curlew Partridge pigeon - *Rakul* 

Straw-necked ibis Peaceful dove - Korlobok

Magpie lark - Borliblib Crow - Wak

White-faced heron - Naburrma Dingo - Dalkken

Great egret - Komorlo Buffalo - Nganabbarru

Intermediate egret - Komorlo Pig



Straw-necked ibis and White-necked heron - *Naburrma* 

# Kordomkordom - Site KAM07 - Camera RC01, RC42, RC44, RW58, RW61

# 2013-08-23 11:30:23 PM M 3/3

22°C

1

# Bulyim - Site KAM08 - Camera RW05, RW20, W7, W16, W27

Species List:Agile wallaby - KornoboloPeaceful dove - KorlobokBuffalo - NganabbarruCrow - WakBrown goshawk - GalawidwidRainbow skink - BurndjinghMagpie lark - BorliblibKorlobit



# Bukbuk - Site KAM09 - Camera RC15, RC27, RC31, RW56, RW59

Species List: Black wallaroo - Barrk Short-eared rock wallaby - Badbong Dingo - Dalkken Pig Brown goshawk Chestnut-quilled rock pigeon - *Doddoro* Crow - *Wak* 



# Bukbuk - Site KAM09 - Camera RC15, RC27, RC31, RW56, RW59

### 2013-09-20 12:42:41 AM M 3/3

10 24°C

**RC27** 



## Bukbuk - Site KAM09 - Camera RC15, RC27, RC31, RW56, RW59



HC550 HYPERFIRE This is the only Badbong (Short-eared rock wallaby) we found after two years of camera trapping

## Malawoyirrek - Anbinnik Forest - Site KAMAA - Camera RC09, RC41, RC43, RW21, RW57

Species List:

Agile wallaby - *Kornobolo* Euro - *Kalkberd* Dingo - *Dalkken* Buffalo - *Nganabbarru* Pig Straw-necked ibis White ibis Great egret - *Komorlo* White-necked heron - *Naburrma* Bar-shouldered dove



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## Malawoyirrek - Anbinnik Forest - Site KAMAA - Camera RC09, RC41, RC43, RW21, RW57 2013-08-14, 12:37:33 PM M 1/3 2013-08-18 8:41:32 AM M 1/3 0 22°C



RW21 2013-08-20 7:23:24 PM M 1/3

2013-09-27 5:20:44 AM M 1/3

22°C 20 Euro - Kalkberd

**RW21** 



# Rocky area half way Milerrelerre to Mirelk - Site KAMAB - Camera RC11, RC19, RW79, RW83

**Species List:** Black wallaroo (male) - *Barrk* 

Chestnut-quilled rock pigeon - Doddoro

Feral Cat



# Rocky area half way Milerrelerre to Mirelk - Site KAMAB - Camera RC11, RC19, RW79, RW83



# Rocky area half way Milerrelerre to Mirelk - Site KAMAB - Camera RC11, RC19, RW79, RW83



### **Rion Rockwallaby**



Black wallaroo (female) - Djukerre

## Rocky area half way Milerrelerre to Mirelk - Site KAMAB - Camera RC11, RC19, RW79, RW83

2013-09-10 8:48:20 AM M 2/3



**RW79** Black wallaroo – Barrk (male) and Djukerre (female)

## Rocky area half way Milerrelerre to Mirelk - Site KAMAB - Camera RC11, RC19, RW79, RW83

2013-08-18 11:00:29 AM M 1/3



**RW79** Chestnut-quilled rock pigeon - Doddoro

# Kunbandjak - White gum flat downstream from Milerrelerre - Site KAMAC – Camera RC29, RW18, RW80

Species List: Agile wallaby - Kornobolo

Dingo - Dalkken

Pig Magpie lark - *Borliblib* 

Buffalo - Nganabbarru

Crow - Wak



Species List: Rock rat

Wedge-tailed eagle

Rufous night heron - Kawk Crow - Wak

White-bellied sea eagle Cane toad

#### 2013-08-29 12:39:56 AM M 1/3





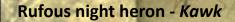
2013-09-09 3:46:26 PM M 1/3

0 34°C

White-bellied sea eagle **RW22** 

2013-08-22 10:51:58 PM M 3/3

27°C



**RW22** 

2013-09-18 1:18:08 PM M 1/3



## Rocky Site behind Milerrelerre - KAMAE - Cameras RW32, RW43, W17, W21, W22

Black wallaroo - Barrk Species List:

Sandstone shrike-thrush - Yukyuk

20

Feral cat

Crow - Wak

#### 2013-08-26 6:59:12 PM M 3/3



## Rocky Site behind Milerrelerre - KAMAF - Camera RW33, RW42, W13, W26, W28

Species List:Black wallaroo - BarrkPeaceful dove - KorlobokEuro - KalkberdCrow - WakFeral CatTwilight monitor - Bongka2013-09-147:19:36PMM1/3





WARDDEKEN26

## Rocky Site behind Milerrelerre - KAMAF - Camera RW33, RW42, W13, W26, W28

2013-08-16 9:10:39 PM M 2/3

25°C

# Black wallaroo (male) - Barrk RECONY RW42



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For more information on the Northern Australia hub of the National Environmental Research Program go to www.nerpnorthern.edu.au



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