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Report on Ascension Island Seabird Restoration Project

March 2006 – July 2006



Wideawakes nesting at Mars Bay – Photo by Anselmo Pelembe

31st July 2006.

Report prepared by:

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We acknowledge and appreciate the support of the Administrator of Ascension, Mike Hill and the Ascension Island Government.

Finally we would like to highlight and acknowledge the support and assistance of the organisations and people of Ascension, without the co-operation of whom this project would not be able to succeed.

Introduction

This is a report on the activities of the cat monitoring part of the seabird restoration project from March 2006- July 2006. The seabird monitoring will be reported in the write up for the scientific paper that is shortly to be produced. Raymond Benjamin is employed by AIG, funded by RSPB and Anselmo Pelembe is employed by AIG, funded by OTEP. These two seabird restoration fieldworkers have implemented the tasks listed and reports on the outcomes of these tasks are given below. The task list was drawn up as a result of the recommendations by RSPB consultant Derek Brown (Brown 2006). The project is managed by Tara Pelembe – AIG Conservation Officer.

Task 1: Get alternative baits ready

1a Catch and prepare:

- *Rabbit (trap) - Administrators*
- *Sheep (shoot) – 2 – ask Stedson*
- *Pet food*

1b Order from UK

- *Cat nip – look for a website where you can orders sprays/leaves (not plants) from and arrange for order*

Final report on Task 1

Rabbits were trapped on Green Mountain at 3 sites: the mountain road; the residency; and the family picnic site. The cage traps that had been used for cat trapping in settlement areas were used for rabbit trapping, with various vegetable and fruit baits. Traps were set in the evening and checked in the morning to ensure that the animal was not in the cage during the heat of the day. Trapping was done for three weeks until enough bait for the planned 6-week cat monitoring period was accumulated. Results of rabbit trapping are as follows:

Table 1: Results of rabbit trapping on Green Mountain

Area	Number of traps set per night	Week 1 non-target	Week 1 Target	Week 2 non-target	Week 2 Target	Week 3 non-target	Week 3 target
Mountain road	6	Not set	Not set	Not set	Not set	0	3
Residency	9	0	8	0	4	0	11
Picnic area	4	0	5	0	2	0	6

Total number of rabbits trapped – 39

Additionally approx 10 rabbits trapped in the carpet of ferns by Stedson were used as bait

Total number of rabbits used for bait = 49

Stedson shot 3 sheep and these were used as bait.

Pet food was sourced and used as alternative bait

Cat nip was sourced and used as alternative bait.

Task 2 – once around the island with new baits – 2 weeks for each line in each area

- 6 weeks total
- Baits divided – 5 sheep, 5 rabbit, 5 pet food.

Final report on Task 2

Original monitoring lines were walked for 2 weeks in each of Areas A, B and C as recommended by Derek Brown in his report (Brown 2006) using alternative baits. Sheep, rabbit, pet food and cat nip baits were used in an attempt to attract any cat that might be resistant to fish baits which had been used for the previous 2 year monitoring period. No cat sign was found during these six weeks, on any of the monitoring lines.

Task 3 – walk lines not yet walked as cat monitoring lines

- GPS lines
- Download tracks
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Final report on Task 3

Various lines that were in areas where there was the potential to find feral cats, that had not been walked as part of the 2 year cat monitoring plan (Bell & Boyle 2004) were walked and GPS records of these tracks were made (shown in map below). No cat sign was found on any of these walks.



Map 1: to show walks done and recorded with GPS covering areas outside of the scheduled cat monitoring lines.

Table 2: overleaf to describe walks done and recorded with GPS covering areas outside of the scheduled cat monitoring lines:

Number of walk	NAME	TRACKS	DATE
GP-1	Dampiers	Dampiers-through ranger site-louver floor - porpoise point to north East Point	10-05-06
GP-2	Palmer's	Palmer's-pass mountain red down to bullock point out to grazen valley	12-05-06
GP-3	Sheep pound	Sheep Pound through behind travels work shop down to BBC Station round Lady Hill finish one boat Dump.	16-05-06
GP-4	Sister's	Two boats shop through liver floor in front of sistercome down English bay road	17-05-06
GP-5	Turners	Sheep pound (Two Boats) – under turners and finish near the windmills	23-05-06
GP-6	Devils riding school	Nasa road near bike area – over spoon crater - through devils riding school to windmills	30-05-06
GP-7	Nasa - waterside	Nasa site – crater cliff, crystal bay – pillarbay - waterside	01-06-06
GP-8	North West Point	Comfortless cove – English Bay	02-06-06
GP-9	Cricket valley	In depression of cricket valley	07-06-06
GP-10	Waterside - Georgetown	Waterside fairs to Georgetown along coast	07-06-06
GP-11	Stack 8	Ladies loo road to stack 8 and back	08-06-06
GP-12	Letterbox	Start near cricket valley, past white horse, letterbox, SE bay and back	31-05-06
GP-13	BBC station	Nasa road – near bike area – lower side of the road through Cable and wireless site to windmills	30-05-06
GP-14	Waterside fairs	Around nesting bird colonies	

Plate1: Raymond Benjamin and Anselmo Peleme on Coastal walk GP-10



Task 4 – Cat register – update (every 6 months) – Due in September

- *Check Ian Fisher for database*
- *Meet once a month with RAF/USAF*

Final report on Task 4

The cat register was updated in March 2006. Ian Fisher kindly assisted with the preparation of a database. Comments on his original draft were sent back to him and we are waiting on the final version of the database which we will use as the basis of the September update. This will be more rigorous as there is the possibility of attaching a photograph and the cat history will be recorded in the new database which will be extremely beneficial to the monitoring of pet cats in the next stage of the project.

Raymond and Anselmo participated in the monthly RAF/USAF/AIG environment staff (Barry Hicks, Pete Ellis and Tara Pelembe) meetings with requests and reports relating to cat monitoring. Both organisations appear supportive.

Task 5 – DNA sample of feral/entire cats

- *Blood from live animal*
- *Tissue sample from dead animal*

Final report on Task 4

No feral cats were captured – we believe that none exist. However in the unlikely case of a capture, a blood sample will be taken.

Task 6 – Seabird monitoring walks

- *Training with NormanRatcliffe*
- *Set up seabird monitoring programme*
- *Seabird data entry*

Final report on Task 6

Raymond and Anselmo were trained by Norman Ratcliffe in techniques for monitoring seabirds on offshore stacks. The seabird monitoring will be developed in the next stage of the programme and all areas of seabird monitoring including seabird data entry will be covered in that programme(Ratcliffe 2006) See Appendix 1 for draft task list for Seabird monitoring.

Task 7 - Turtle beaches/wideawakes

- *Check turtle beaches*
- *Check wideawake Fairs*

Final report on Task 7

This is ongoing during season. Turtle beaches were checked over the turtle season and results were as follows:

Table 3: results of monitoring turtle nesting beaches

Beach Numbers	Name of Beach	Number of visits	Cat sign	Comments
1	Pan Am	3	No	
2	Turtle shell	3	No	
3	Clarkes	3	No	
4	Payne Point	3	No	
5	Mitchell Cove	1	No	
14/15	English Bay	5	No	
16/17/19/20	North Point	0	0	Not a very sandy beach
21-26	Porpoise point	3	0	
27	NE Bay	3	0	
28	NE Point	3	0	
29	Hannays	3	0	

The wide-awake fairs were checked for deadbirds during the season (starting March 2006 - ongoing as the season is not yet finished) and results were as follows:

Table 4: results of monitoring wideawake fairs

Location	No of visits	No of dead adults	No of dead chicks	comments
Waterside	6	0	21	All small downy chicks - over 2 visits.
Mars Bay	5	0	30	Found over 2 visits - all small downy chicks
Rocket pad	1	52	0	Killed under the ariel fields - separate report appendix 2

Both turtle nesting beaches and wideawake nesting grounds will be checked during season in the next phase of the project as well.

Task 8 - Settlement areas

- *Order more cameras*
- *Try to get existing cameras working*
- *Set up cameras in settlement areas*

Final report on Task 8

5 new cameras were ordered, they are physically much more suitable for the task, however trials have raised various concerns as to whether they are 100% reliable and can guarantee to record a cat when it is in the area. Discussions are in place with the suppliers of the camera to solve this problem. Camera trials have been done in settlement areas, and the presence of

pet cats has been recorded. 3 cameras will be placed in each settlement for 2 weeks over the next 8 weeks.



Plate 2: Image of pet cat recorded on new cameras – time and date recorded by camera

Task 9 – Office

- *Reports (status reports)*
- *Daily record*
- *Islander article (once a month)*
- *Conservation quarterly article once every 3 months*

Final report on Task 9

Status reports are produced weekly and the daily record is kept. Copies of these are available on request. The Conservation Quarterly which is at the printers has an update on the project, and there is a weekly update on Conservation in the local islander newspaper – next weeks one is to focus on the seabird restoration project.

Task 10 - maintain equipment

- *Traps*
- *Landrover*
- *Other*

Final report on Task 10

All equipment has been maintained and is in good working order. The landrover is cleaned weekly and serviced every 3 months. Traps are cleaned on a regular basis and oiled to ensure that they do not rust.

Task 11 - Inspection of ships

- *Liaise with police/immigration/Customs*

Final report on Task 11

After discussions with the Chief of Police, it was agreed that Raymond and Anselmo should be part of the boarding party for non-scheduled ships to ensure that there are no entire cats on board. They have obtained their security pass for this purpose and will be informed by the shipping agent of all non-scheduled ships. We are confident that scheduled ships are aware of the animal import permit process.

Task 12 - research rat predation on Sooty tern colonies

- *Training in rat indexing*
- *Rat indexing before the Sooty terns come in (end of May)*
- *Research rat predation*

Final report on Task 12

Raymond and Anselmo undertook training in rat indexing. This training was given by the Environmental Health section. Rat indexing was done on the wideawake fairs (results in Appendix 3) by the Environmental Health section soon after the arrival of the sooty terns this season as their arrival was unexpectedly early. Rat predation has been noted on letterbox and further research will be done under the seabird monitoring task list.

Conclusions:

- It was possible to achieve the list of outputs set in March. There are a few outputs that are ongoing and will continue for the duration of the project. These have been identified in the report above.
- According to Derek Brown and Norman Ratcliffe in their reports it seems appropriate that the move be made from direct cat monitoring to direct seabird monitoring to cover tasks listed in Appendix 1.
- The cameras still need to be assessed to ensure that they are 100% reliable otherwise they cannot be used as an effective monitoring tool, if it cannot be ensured that they will detect the presence/absence of cats.
- It appears that all available detection mechanisms have been used and there still has not been any record/sighting of a feral cat since February 2004. We feel that we have reached the stage where the island can be declared feral cat free. We would like this to be considered by RSPB.
- The dead birds at the Ariel fields are a new phenomenon that need to be carefully monitored to see what level of impact is being made on the adult Sooty tern population.
- Seabird monitoring is a vital part of the seabird restoration project and long-term monitoring is an excellent measure of success in terms of recording the rate of seabird return, while also being a vital tool for the continued monitoring of cats. It is therefore fundamental to the long-term success of this project that two seabird restoration fieldworkers are employed for the long-term future.

References:

Bell M & Boyle D (2004) Ascension Island Manual for Feral Cat Monitoring *Unpublished report prepared for RSPB*

Brown D. (2006) Ascension Island Seabird Restoration Project Cat monitoring and quarantine review *unpublished report prepared for RSPB*

Ratcliffe R. (2006) Report on trip to review seabird monitoring and research on Ascension Island. *Unpublished report prepared for RSPB*

Appendix 1: Draft Schedule for seabird/cat monitoring August 2006 – July 2007

Detailed description of tasks:

Monitoring known nesting sites (study sites) + stack/cliff counts

Letterbox (1)	Searching for new nests (All areas Louise Ledge, Razors edge, Greek Hill, Mandela Ridge, Benji Hill, Caren Hill, Split Hill, Letterbox, South East Bay, Devils Inkpot, Wig Hill) + stack count (9) + cliff count (SE Bay cliffs)
Letterbox (2)	Monitoring existing nests (all areas: Louise Ledge, Razors edge, Greek Hill, Mandela Ridge, Benji Hill, Caren Hill, Split Hill, Letterbox, South East Bay, Devils Inkpot, Wig Hill)
Cocoanut Bay/Pillar Bay 1	Searching for new nests + stack count (10, 11, 12, 13, 14) + Cocoanut Bay cliffs count
Cocoanut Bay/Pillar Bay 2	Monitoring existing nests
Opposite stack 8 (1)	Klinka Klub – Ladies Loo: Searching for new nests + Stack count (6, 7, 8)
Opposite stack 8 (2)	Klinka Klub – Stack 8: Monitoring existing nests
North West Point (1)	Comfortless – NW point Searching for new nests
North West Point (2)	Comfortless – NW point: Monitoring existing nests
North West Point (3)	Georgetown – Stack 5 boat trip – on island monitoring of
Stacks 1-5	
Hummock Point (1)	Searching for new nests
Hummock Point (2)	Monitoring Existing nests

Monitoring turtle nesting beaches

Turtle nesting beaches (1)	Beaches 1-4 (Pan Am, turtle shell, Beach 3, Payne Point)
Turtle nesting beaches (2)	Beaches (porpoise point, NE Bay, Ariane)
Turtle Nesting Beaches (3)	Beaches (English Bay Beaches)

Random GPS walks

GPS walks	Random walks around the island to look for cat sign
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Cat register

Cat register update (1)	Send out letters to cat owners
Cat register update (2)	Update register based on return letters
Cat register update (3)	Phone owners who haven't returned forms
Cat register update (4)	Update register based on phone calls

Cat register update (5) Visit all owners to check register records and photograph cat.

Coastal Search

Coastal search (1)	Sharp Cliff – Crystal Bay
Coastal Search (2)	Crystal Bay – Cocoanut Bay
Coastal Search (3)	Pillar Bay – Waterside Fairs
Coastal Search (4)	Waterside – Mars Bay
Coastal Search (5)	Mars Bay – Georgetown
Coastal Search (6)	Georgetown – Comfortless
Coastal Search (7)	Ladies Loo – North East Bay
Coastal Search (8)	North East Bay – Weather post
Coastal Search (9)	Spire Beach.

Video surveillance (Settlement)

Settlement (1)	Georgetown
Settlement (2)	Travellers
Settlement (3)	Two Boats
Settlement (4)	USAF base

Import/Export control (Cats)

Import control (1)	Board visiting non-scheduled ships/yachts
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Rat Indexing

Rat Indexing (1)	Letterbox
Rat Indexing (2)	Stack 8
Rat Indexing (3)	Cocoanut Bay
Rat Indexing (4)	Pillar Bay
Rat Indexing (5)	Hummock Point
Rat Indexing (5)	North West Point

Monitoring Wideawake Nesting

Wideawake (1)	Waterside Fairs (walk perimeter of colony, check for dead birds/chicks/predated eggs)
Wideawake (2)	Mars Bay (walk perimeter of colony, check for dead birds/chicks/predated eggs)
Wideawake (3)	Rat indexing Waterside Fairs
Wideawake (4)	Rat indexing Mars Bay
Wideawake (5)	Rat poisoning Waterside Fairs
Wideawake (6)	Rat poisoning Mars Bay
Wideawake (7)	Video surveillance (Mars Bay)
Wideawake (8)	Video surveillance (Waterside)

Ringling

Ringling (1)

Ring chicks in situations where nests are close together.

Training

Ringling training

Anselmo and Raymond need to be trained in ringling.

Boatswainbird Island

BBI (1)

Counts of Masked Boobies on BBI (June/July)

BBI (2)

Counts of Red-footed Boobies on BBI (opportunistic)

BBI (3)

Counts of Brown Boobies on BBI (opportunistic)

Contingency response

Contingency response (1)
schedule)

Respond accordingly to reports of cat sightings (not able to

Radio Collaring

Radio Collar (1)

Radio collar to

Appendix 2 Report on Dead Sooty terns found under the ariel fields at Rocket pad – USAF Base 26th July 2006

Introduction

On Wednesday 25th July the Conservation Department was notified that a number of dead sooty terns were seen scattered around the area of Rocket Launch aerial site. Two members of staff visited the site at 6pm and saw returning wide awakes flying through and above the ariel fields. On 26th July 4 Conservation Department Staff members and a volunteer went to look at the area, with permission from USAF Security. Under one of the aerials we found 50 fresh dead sooty tern bodies and 2 live injured Sooty terns. It was also noted that there were a number of skeletons of old sooty terns.



Map to show location of ariel fields



GPS locations of dead birds in ariel field 1

Action

The US Base Commander, and the island Administrator were notified about the situation, and the Base Commander offered to accompany conservation on the next visit to the site.

AIG Conservation will monitor the area weekly in an attempt to discover the number of birds killed over this period of time to get an idea of the total impact on the sooty tern population.

Discussion.

This is the first time that this phenomenon has been recorded; however skeletons in the area suggest that it has been happening in previous seasons. Regular weekly monitoring will enable an accurate record of the impact which can then inform decision-makers. Possible mitigation measures might be considered once the full impact is known. It is to be noted that none of the dead birds were predated by cats or rats.



Photo of dead sooty tern under the ariel fields at the Rocket Pad – Photo by Mashay Yon

Appendix 3 – Rat index results for Wideawake Fairs May 2006

Rat Index – Mars Bay.

- The Rat Indexing started at Mars Bay on the 31st May 2006, which fifty rat traps were set for three nights.
- The rat traps were then checked on the 01st June 2006, 0 rats were caught.
- Checked again on the 02nd June 2006, 0 rats were caught.
- The last check was on the 03rd June 2006, 0 rats were caught.

Index of Abundance

50 traps set for 3 nights = $50 \times 3 = 150$ total trap nights.

Trap-nights lost = 0.5 (captures + non-target captures + empty sprung traps) = $0.5 \times (0 + 1 + 8) = 4.5$.

Therefore corrected trap-nights = Total trap nights – trap nights lost = $150 - 4.5 = 145.5$.

Index of Abundance = Captures x 100 divided by corrected trap nights = 0×100 divided by $145.5 = 0.00$ rats per 100 trap-nights.

Rat Index – Waterside Fair's.

- The Rat Indexing started at the Waterside Fair's on the 07th June 2006, which fifty rat traps were set for three nights.
- The rat traps were then checked on the 08th June 2006, 4 rats were caught.
- Checked again on the 09th June 2006, 3 rats were caught.
- The last check was on the 10th June 2006, 7 rats were caught.

Index of Abundance

50 traps set for 3 nights = $50 \times 3 = 150$ total trap nights.

Trap-nights lost = 0.5 (captures + non-target captures + empty sprung traps) = $0.5 \times (14 + 1 + 9) = 12$.

Therefore corrected trap-nights = Total trap nights – trap nights lost = $150 - 12 = 138$.

Index of Abundance = Captures x 100 divided by corrected trap nights = 14 x 100 divided by 138 = 10.14 rats per 100 trap-nights.

Additional information on rat control and monitoring at Wideawake Fairs 2006 (Provided by Kevin Williams – AIG Environmental Health Officer)

Here is the information on the poisoning programme for Mars Bay and Waterside Fairs.

The amount of poison used in 2005 was: 20kg.

The amount of poison used from January 2006 to the end of June 2006 was: 18kg.

Here are the results for the indexing at Mars Bay for February 2005:

50 traps set for 3 nights = 50 x 3 = 150 total trap nights.

Trap-nights lost = 0.5 (captures + non-target captures + empty sprung traps) = 0.5 x (2+0+5) = 6.

Therefore corrected trap-nights = Total trap nights - trap nights lost = 150-6 = 144.

Index of Abundance = Captures x 100 divided by Corrected trap nights = 2 x 100 divided by 144 = 1.39 rats per 100 trap-nights.

The indexing at Waterside Fairs this year shows that there are rats around this area at the moment. It seems that they are situated around the exterior of the bird ground. An extra 18 bait boxes have been put around the exterior where the rat traps were laid down for the indexing.

There are 22 bait boxes at Mars Bay and 32 bait boxes at Waterside Fair's.

No rats were caught during the indexing at Mars Bay.

The results of the indexing for 2006 have been sent to Tara. I will hand the GPS on to Tara so that she can transfer the location of the bait stations at the bird grounds onto the map. (*Nb not received yet – TP*)