CAT PREDATION OF SMALL MAMMALS ON WEST ISLAND

Introduction

The primary aim of this project was to encourage the recovery of small native mammals on West Island, in the Gulf of Carpentaria, through a reduction in cat predation. West Island is part of the Sir Edward Pellow Islands and is 13,000 ha in size. It forms part of the traditional lands of the Yanyuwa people. The islands are renowned for their conservation significance, and they are a refuge for nationally threatened mammal species. The Yanyuwa Indigenous Protected Area was declared across the Pellew Islands in 2012.

This project was conducted by the li-Anthawirriyarra Sea Rangers based at the Mabunji Aboriginal Resource association, in Borroloola under the guidance of Desert Wildlife Services (DWS) and the Northern Territory Parks and Wildlife.

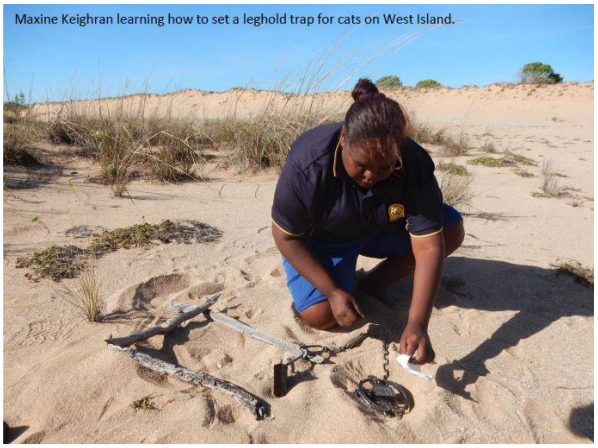
Background & Motivation

The West Island cat problem started when four kittens were introduced in 1994. Prior to the arrival of cats, surveys of West Island in 1967 and 1988 revealed the presence of five species of small native mammals. Four subsequent surveys conducted between 2003 and 2009 failed to detect any mammal species. It was feared that they were all locally extinct. In response to this an annual cat baiting program run by the rangers has been conducted every year since 2011.

Activities

From 2011 - 2015 an annual baiting program was conducted on West Island using 1080 delivered in Eradicat baits distributed by air and from 4-wheel motorbikes. Firstly, aerial baiting was undertaken an intensity of 40 baits per square kilometre, and followed up with ground baiting. To confirm the cat control program was effective the relative abundance of cats was measured using a number of methods, including camera traps, sign searches and tracking surveys

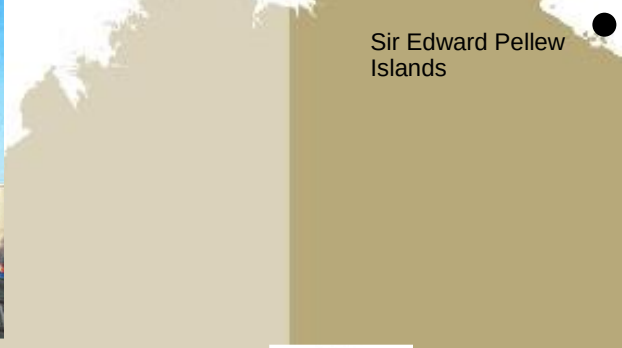
As well as the baiting program, routine small mammal monitoring on West Island and Vanderlin Island was conducted as well as surveying historical sites where Northern Phascogale and Pale Field Rat had previously been recorded.



Maxine Keighran learning how to set a leghold trap for cats on West Island.

Outcomes

Baiting produced a significant knockdown in the cat population with few tracks detected in the annual monitoring surveys in April 2013 and April 2014. Three native mammal species were regularly detected in the annual monitoring surveys between April 2013 and April 2014. In contrast to the ongoing decline of small mammals across the Top End over the last decade, West Island is beginning to show a recovery of native mammals.



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Steven O'Keefe holding a Grassland Melomys captured in an Elliott trap

There is increasing evidence of the Grassland Melomys being established in many of the creek systems. Water Rats have been found in some creeks and the Delicate Mice are now regularly detected within the beachfront dunes. Concurrent monitoring on neighbouring Vanderlin Island, where no predator manipulation has occurred, has shown no increase in native mammal populations during the past five years, in contrast to the recovery of small mammals on West Island.

Although the West Island cat population showed some sign of recovery over the 2014/15 wet season, aerial and ground baiting conducted throughout the island in 2015 appears to have reduced the cat population to the point where only signs of a few cats were recorded during the 2016 survey.

Future Opportunities

There are a proportion of cats on West Island that will probably never take baits, and as native mammal populations continue to increase, baiting will become less effective. To overcome this a leghold trapping programme has commenced, but this is a very time-consuming method of cat control. A more efficient method would be deployment of Cat Grooming Traps where cat tracks are found.

PROJECT HIGHLIGHTS

Cat trap monitoring at **20** sites with **800** camera nights.

Cat tracking surveys on West Island: **2** surveys over **20**km.

7 Sea Rangers and **2** Traditional Owners trained in trapping, baiting and Elliott trapping.

Increase in Delicate Mouse and Grassland Melomys species since **2012** knockdown of cat population.

This device uses infra-red beams to distinguish a cat from other non-target species, and sprays a jet of poison on the fur of the cat. As cats are compulsory groomers they ingest the poison whilst cleaning themselves.

Acknowledgments

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References

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FURTHER INFORMATION

Territory Natural Resource Management
08 8942 8300 / info@territorynrm.org.au
www.territorynrm.org.au

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