

Department of Environment, Parks and Water
Security

Managing feral cats to protect the Central Rock-rat

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@alsnothome



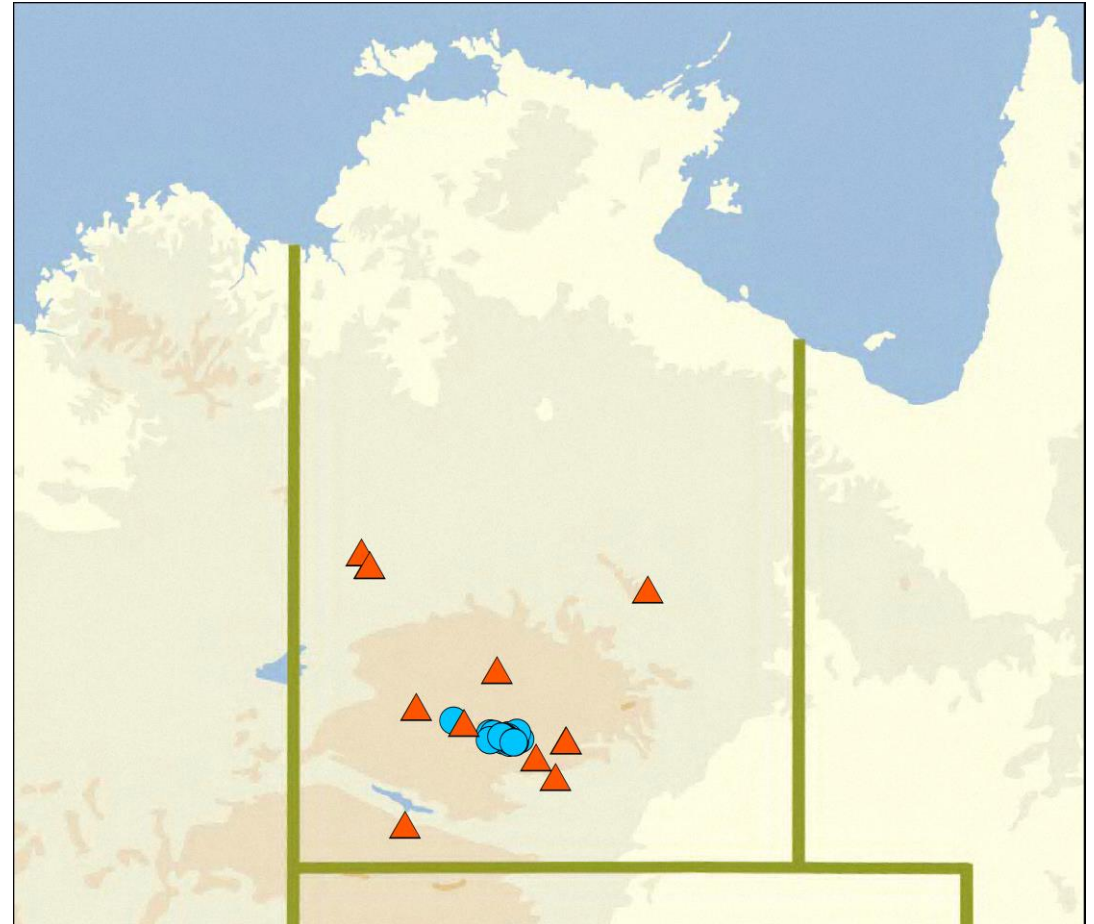
Central Rock-rat

Zyzomys pedunculatus

Critically Endangered

Threatened species strategy:
20 Mammals by 2020
110 priority species

Predation by feral cats a key
threatening process



Feral cat management

1. Experimental feral cat control 2016-2020
 - Baiting and monitoring feral cats
 - Monitoring response of rock-rats and other native animals
2. Expand feral cat management
 - Include all known rock-rat localities
 - Monitor feral cats
3. Developing management plans
 - Traditional Owners and rangers
 - Haast Bluff ALT and Tjoritja National Park

Experimental feral cat control

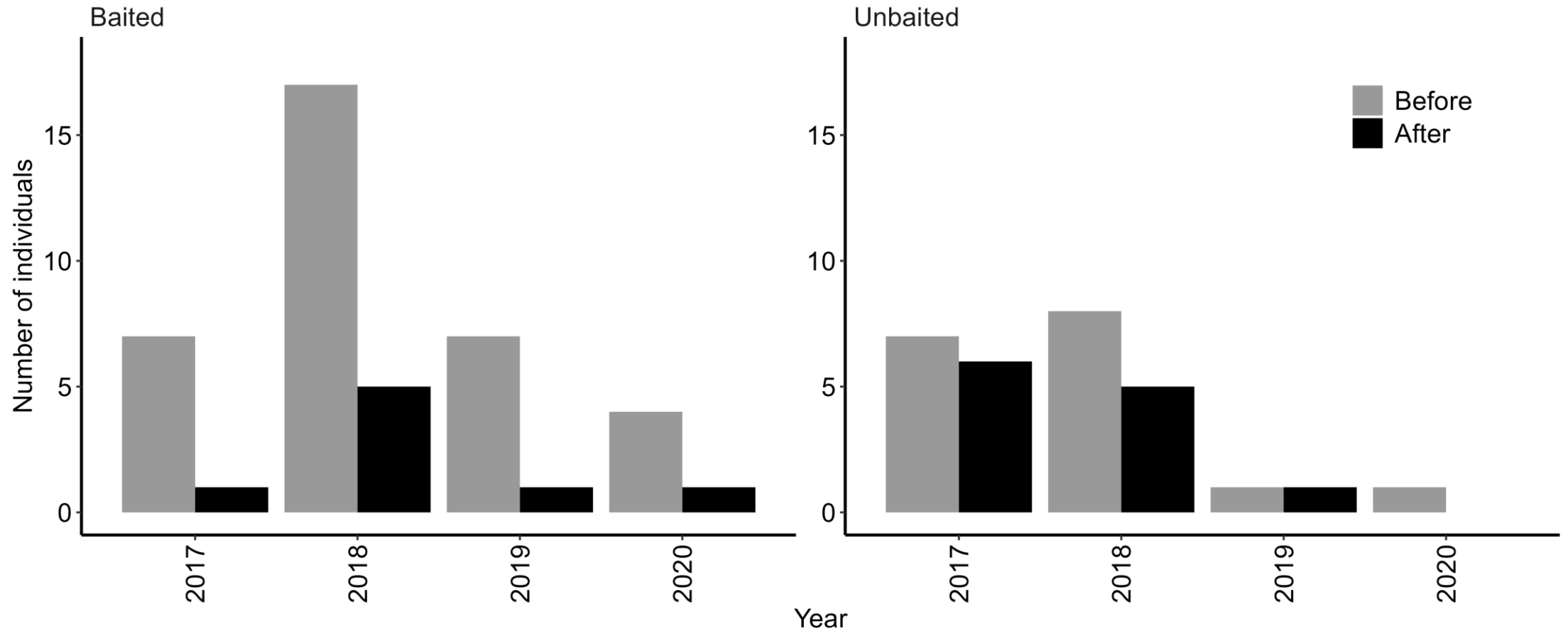


- Two baited and two unbaited areas
- Eradicator 1080 baits dropped from helicopters at 50 baits km²
- Monitoring cats before and after baiting
- Repeated 2016-2020

Experimental feral cat control



Experimental feral cat control



Monitoring Central Rock-rat

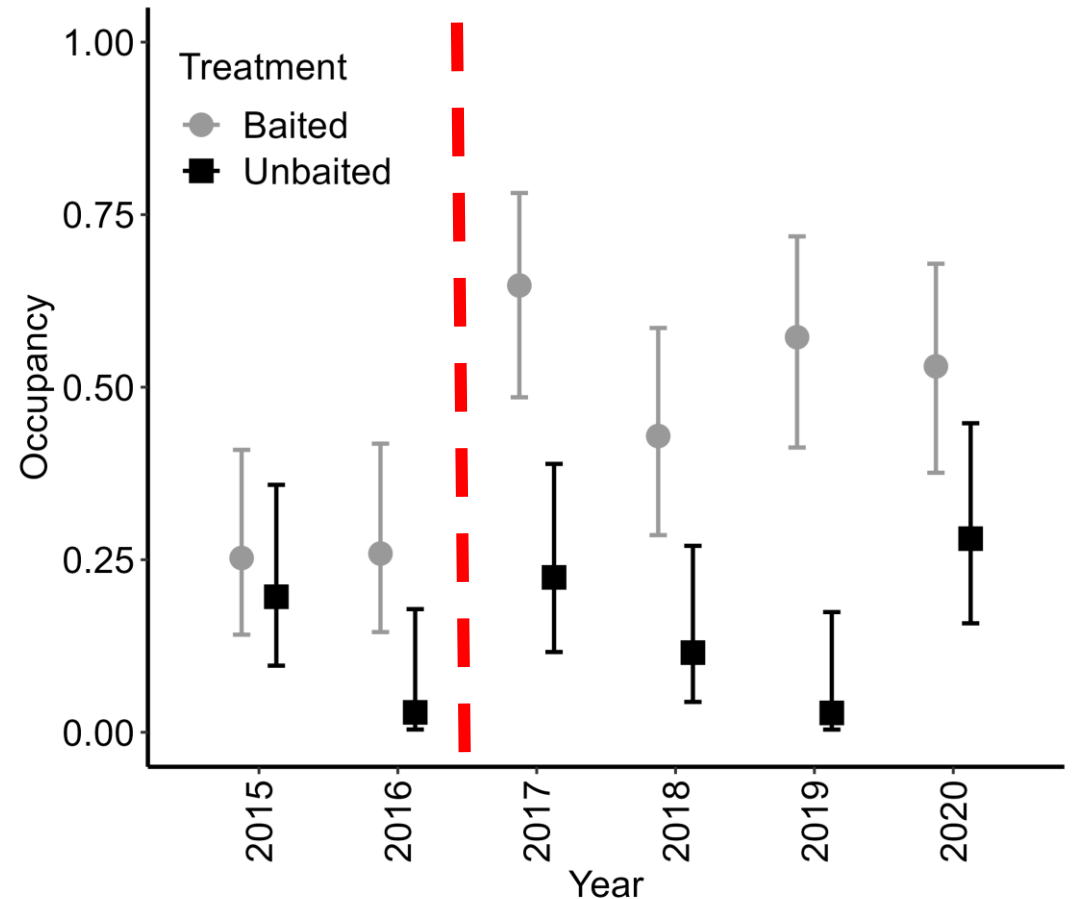


Monitoring Central Rock-rat

Higher probability of colonisation in baited area

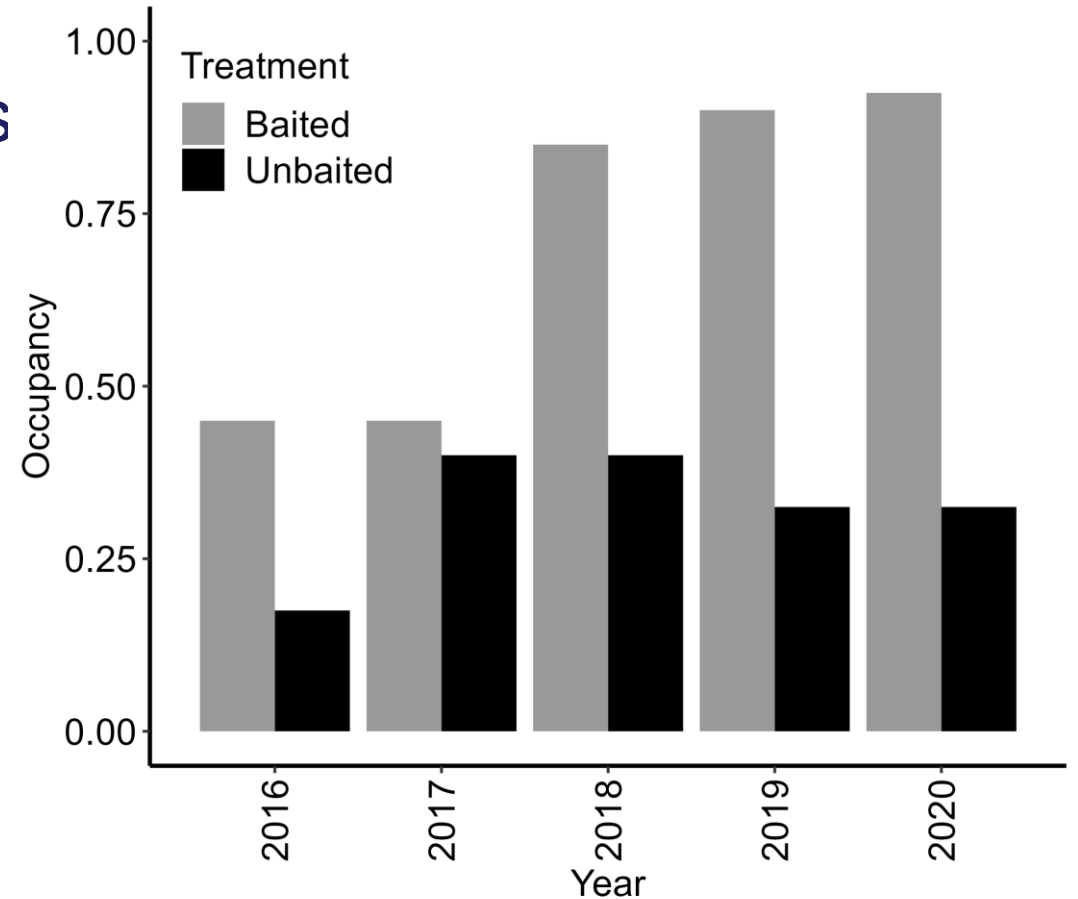
Lower probability of extinction in baited area

Higher occupancy in baited area than unbaited



Monitoring other species

- No off target impacts:
 - Fat-tailed Pseudantechinus
 - Long-tailed Dunnart
- Improved occupancy:
 - Black-footed Rock-wallaby



Experimental feral cat control

Baiting feral cats:

Removed feral cats from treatment areas

Improved occupancy of Central Rock-rat

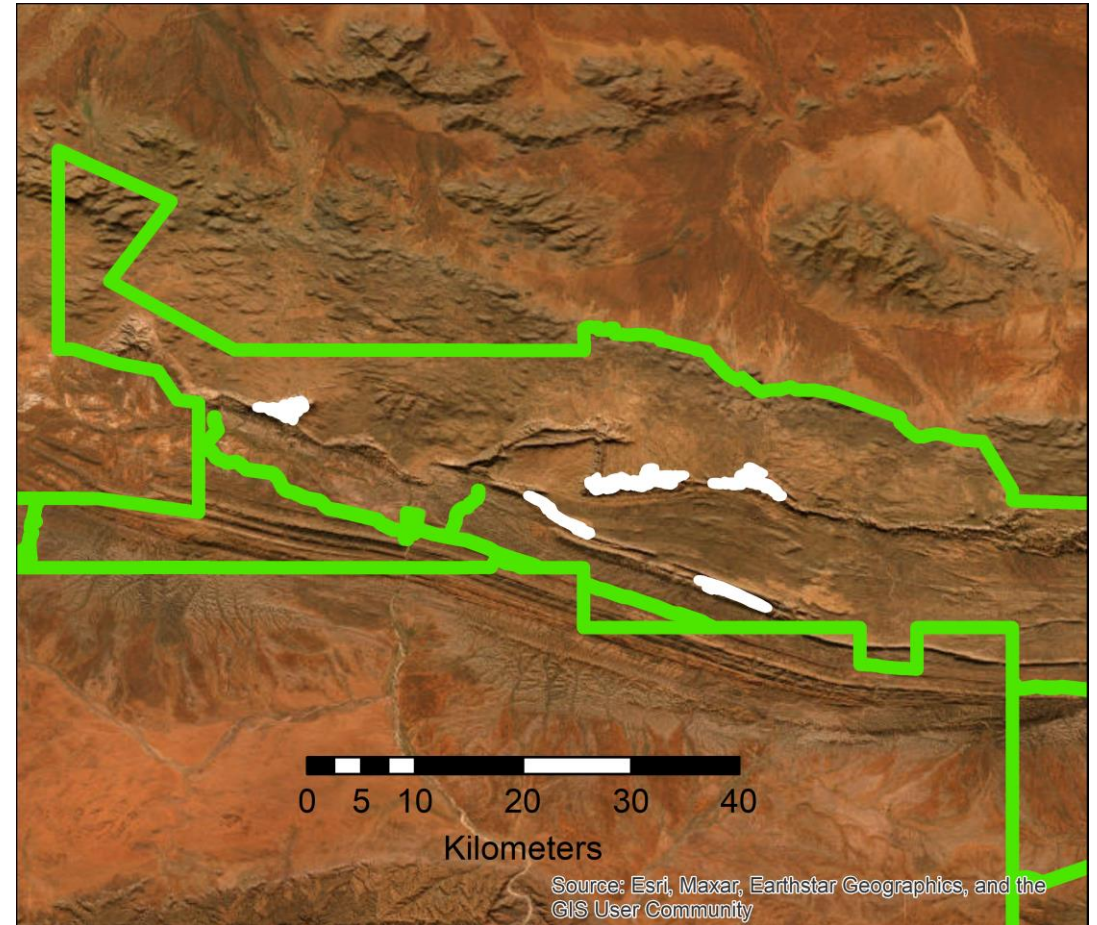
(and Black-footed Rock-wallaby)

Expand feral cat management

Protect Central Rock-rat refuges

Colonise adjacent areas

Increase connectivity



Expand feral cat management

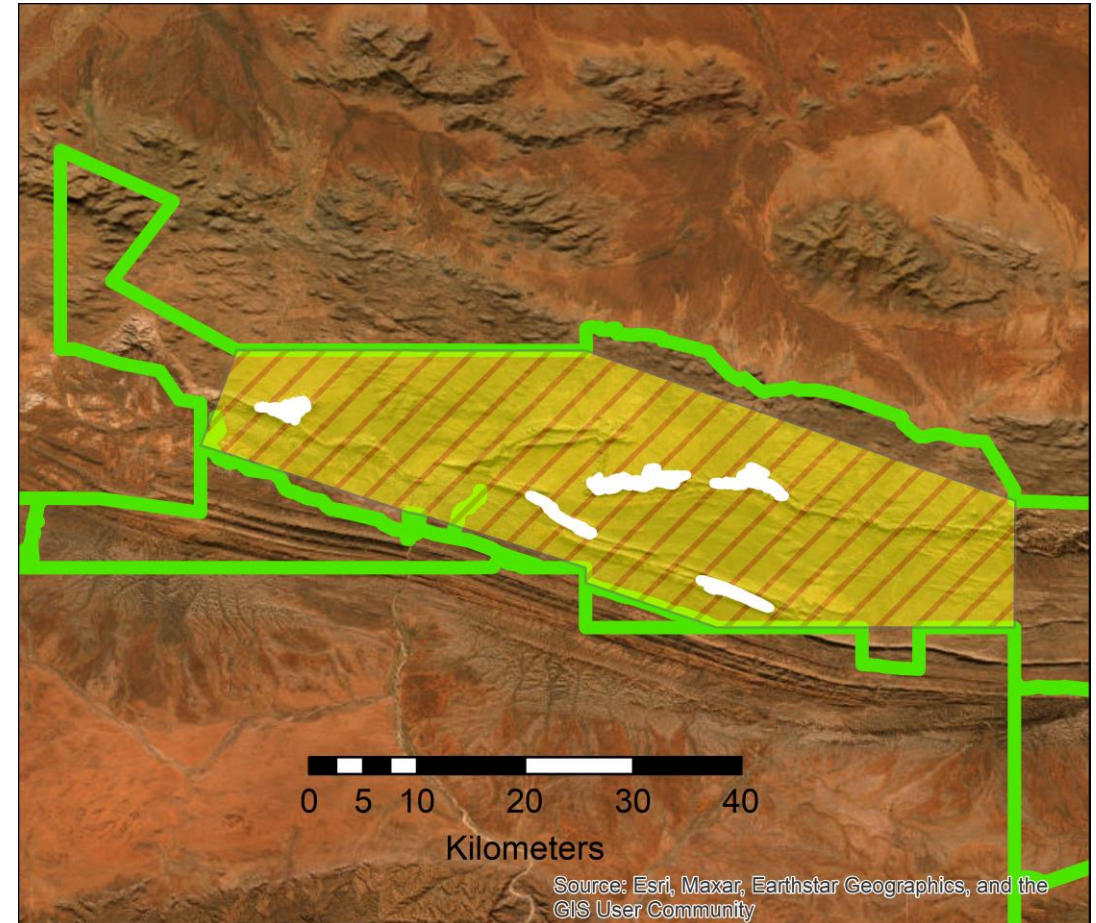
Protect Central Rock-rat refuges

Increase connectivity

Areas for expansion

1100 km² feral cat control area

~30 baits km²

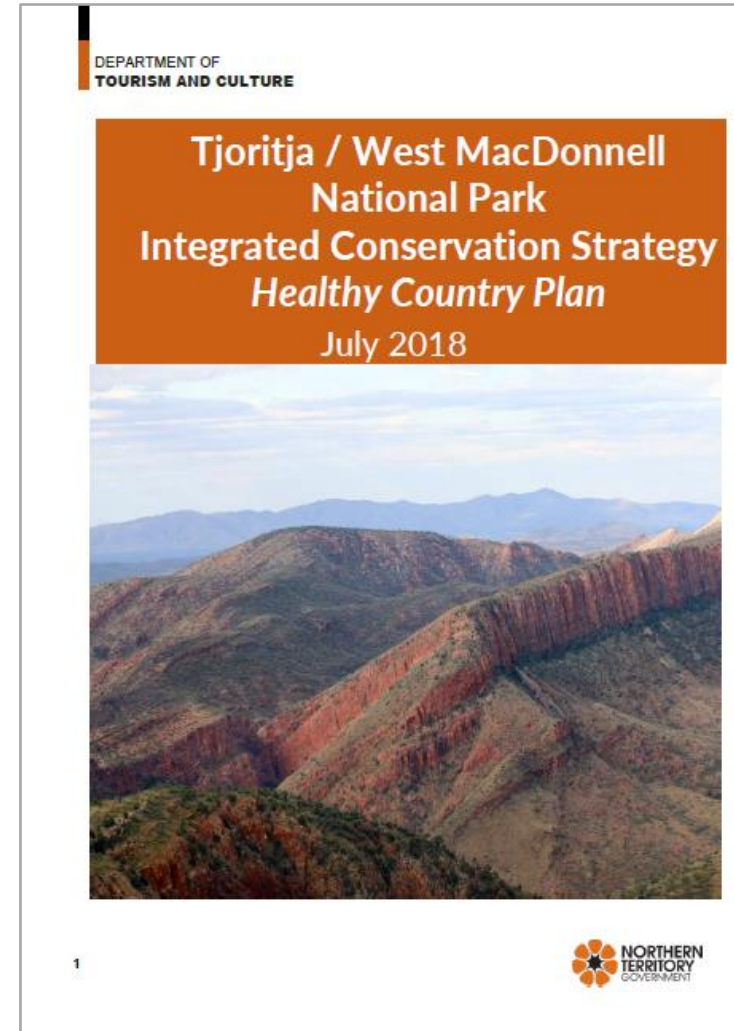


Expand feral cat management

- Cat monitoring using camera traps
 - Forty 3 x 3 km grid cells
 - 20 in baited area
 - 20 in unbaited area
 - Two camera traps in each grid cell
- Image processing using MegaDetector and CPW Photo Warehouse
- Occupancy before and after baiting
- Significant interaction between treatment and session

Developing management plans

- Consultation
- Identifying values and risks
- Methods available
- Spatial planning
- Monitoring
- Training



Acknowledgments

- Traditional owners
- NT Parks and Wildlife
- Anangu Luritjiku Rangers
- Central Land Council
- WA DBCA
- Territory NRM
- Threatened Species Commissioners
- DCCEEW
- DEPWS Flora and Fauna

Bonus Rock-rat material!

La Niña – three ‘wet’ summers

Population boom!!!

Translocation – AWC Newhaven

Captive breeding – ASDP

Fire management

Habitat manipulation

