



Department of **Biodiversity,
Conservation and Attractions**



DIRK HARTOG ISLAND
RETURN TO 1616

Measuring wildlife changes in **Dirk Hartog Island National Park**



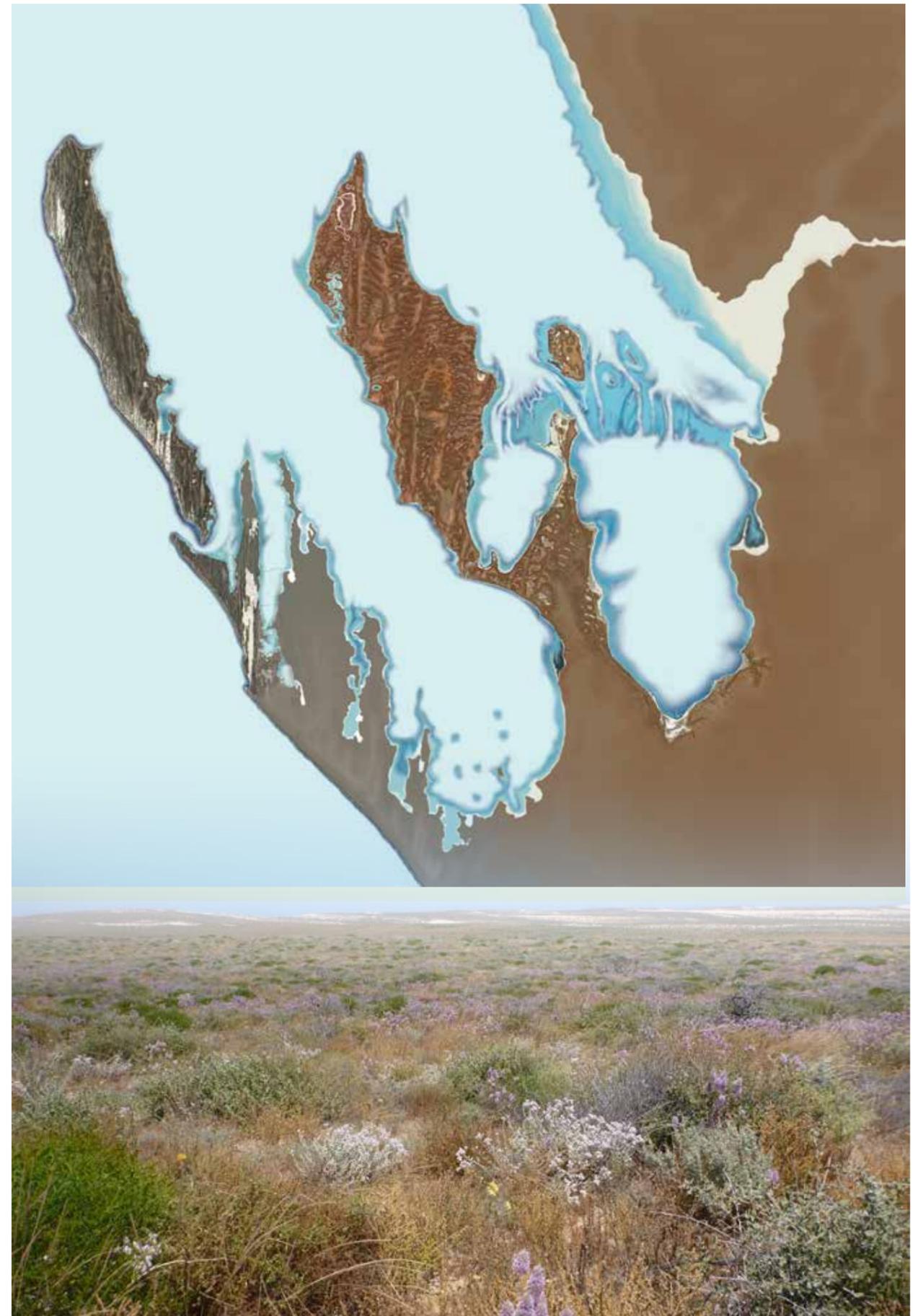
Measuring wildlife changes in Dirk Hartog Island National Park

Dirk Hartog Island is Western Australia's largest island. When visited by Dirk Hartog in 1616, the island was in pristine condition with a rich mammal fauna and flourishing vegetation. Since that time, introduced plants and animals have degraded the island, causing the local extinction of native species.

The Dirk Hartog Island National Park *Return to 1616* Ecological Restoration Project is restoring the island ecology. Introduced sheep, goats and feral cats have been removed, making it safe for the native animal species that didn't survive, to be returned.

Before this project began, a trapping program was commenced to discover which small vertebrate animals had managed to survive on the island and how they would respond to the changes being made by the *Return to 1616* project.

Each year now, scientists and volunteers travel to the island to monitor small animal populations. This booklet contains some of the animals they find and the scientific methods they use.





Trapping

Several types of traps are used to find out what ground dwelling animals are living in Dirk Hartog Island National Park including pitfall traps, funnel traps and Elliott traps.



1



2



3



4



5



6

- 1 Pitfall traps are a series of buckets dug into the ground with netting running between them to guide animals into the trap.
- 2 3 A range of different animals can be caught in pitfall traps.
- 4 Funnel traps catch small animals as they run along the netting between pitfall traps.
- 5 Scientists and volunteers measure, weigh and record information on the animals found.
- 6 Small metal cages called Elliott traps are baited with special food to entice animals to enter.



Observation

A range of other animals can sometimes be seen when scientists visit the island. These extra observations can also be important information.



1



2



3



4

1 Bush stone curlew
Burhinus grallarius

2 Black and white fairy-wren
Malurus leucopterus

3 Southern emu-wren
Stipiturus malachurus hartogi

4 Eastern reef egret
Egretta sacra



5



6



7



8

5 Pied cormorant
Phalacrocorax varius

6 Osprey
Pandion cristatus

7 White-bellied sea eagle
Haliaeetus leucogaster

8 Nankeen kestrel
Falco cenchroides



9



10



11



12

9 Barn owl
Tyto javanica

10 Centipede

11 Loggerhead turtle hatchlings
Caretta caretta

12 Wolf spider carrying babies
Tetrallycosa oraria



Native Rodents



1



2



3



4

Dasyurids



1



2

1 2 Little long-tailed dunnart
Sminthopsis dolichura

- 1 Sandy inland mouse
Pseudomys hermannsburgensis
- 2 Ash grey mouse
Pseudomys albocinereus
- 3 Sandy inland mouse
Pseudomys hermannsburgensis
- 4 Ash grey mouse
Pseudomys albocinereus



Snakes



1 Children's python
Antaresia childreni

2 Mulga snake
Pseudechis australis

3 Western brown snake (Gwardar)
Pseudonaja mengdeni

4 Western brown snake (Gwardar)
Pseudonaja mengdeni

5 Black-necked whipsnake
Demansia calodera

6 Southern blind snake
Anilius australis

7 Black-naped snake
Neelaps bimaculatus

8 West coast banded snake
Simoselaps littoralis



Legless lizards



1



2



3



4



5



6



7



8

1 Fraser's delma
Delma fraseri

2 Burton's snake-lizard
Lialis burtonis

3 Burton's snake-lizard
Lialis burtonis

4 Fraser's delma
Delma fraseri

5 Shark Bay worm-lizard
Aprasia haroldi

6 Spinifex delma
Delma butleri

7 Keeled legless lizard
Pletholax edelensis

8 Shark Bay worm-lizard
Aprasia haroldi



Skinks



1



2



3



4



5



6



7



8

1 Bobtail
Tiliqua rugosa

2 Bobtail
Tiliqua rugosa

3 Stokes' skink
Egernia stokesii

4 Stokes' skink
Egernia stokesii

5 Western slender blue-tongue
Cyclodomorphus celatus

6 Variable-striped robust slider
Lerista varia

7 Line-spotted robust slider
Lerista lineopunctulata

8 West coast Ctenotus
Ctenotus fallens



Skinks



1 West coast long-tailed Ctenotus
Ctenotus australis

2 Blinking broad-striped slider
Lerista connivens

3 Keeled slider
Lerista planiventralis

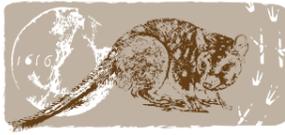
4 Pale-flecked snaked-eyed skink
Morethia lineocellata

5 Elegant slider
Lerista elegans

6 Fence skink
Cryptoblepharus plagiocephalus

7 West coast long-tailed Ctenotus
Ctenotus australis

8 Western slender blue-tongue
Cyclodomorphus celatus



Dragons



1 Bearded dragon (juvenile)
Pogona minor

2 Bearded dragon
Pogona minor

3 Spotted military dragon
Ctenophorus maculatus

4 Western netted dragon
Ctenophorus reticulatus

5 Western netted dragon
Ctenophorus reticulatus

6 Shark Bay heath dragon
Ctenophorus butlerorum



Geckos



1



2



3



4



5



6



7



8

1 Variegated dtella
Gehyra variegata

2 Ornate gecko
Diplodactylus ornatus

3 White-spotted ground gecko
Lucasium alboguttatum

4 Smooth knob-tailed gecko
Nephurus levis

5 Smooth knob-tailed gecko
Nephurus levis

6 Ornate gecko
Diplodactylus ornatus

7 Variegated dtella
Gehyra variegata

8 White-spotted ground gecko
Lucasium alboguttatum



Geckos



1



2



3



4



5



6



7



8

1 Southern barking gecko
Underwoodisaurus milii

2 Southern barking gecko
Underwoodisaurus milii

3 Soft spiny-tailed gecko
Strophurus spinigerus

4 Soft spiny-tailed gecko
Strophurus spinigerus

5 White-spotted ground gecko
Lucasium alboguttatum

6 Bynoe's gecko
Heteronotia binoei

7 Soft spiny-tailed gecko
Strophurus spinigerus

8 South-western clawless gecko
Crenadactylus occidentalis



Goannas



1 Gould's goanna
Varanus gouldii

Acknowledgements

Thanks to all those involved in the ongoing small vertebrate animal survey including DBCA scientists and staff, volunteers and those who have generously supplied photographs:

- | | | | |
|------------------|-----------------|---------------------|----------------|
| Keith Morris | Dr Judy Dunlop | Aline Gibson Vega | Marcel Kemp |
| Dr Lesley Gibson | Dr Fiona Knox | Gavan Mullan | Global Gypsies |
| Mark Cowan | Dr Saul Cowen | Gerhardt Strumpher | Kelly Rayner |
| Dr Colleen Sims | Dr Karl Brennan | Babs and Bert Wells | |



Recording details of captured animals.



Department of Biodiversity,
Conservation and Attractions



Biodiversity and
Conservation Science