Australian Wildlife Conservancy

FAURE ISLAND Dec 2004

Shark Bay Mice *(Pseudomys fieldi)*

Introduction and Background

Under a Translocation Proposal endorsed by the Department of Conservation and Land Management (April 2002) eighty-six (41 female and 45 male) Shark Bay Mice were translocated to Faure Island on the 23rd June 2002. Twenty of these mice were radio-collared, incorporating 10 males and 10 females. A second translocation was conducted on the 7th October 2002 when a further 28 (14 females and 14 males) were released. Six of these, including 4 females and 2 males, were collared. All animals from both translocations were sourced from a captive breeding colony at the Perth Zoo that was established in 1996. This report details information gained during this reporting period July 2004-Dec 2004 and is an addendum to previous reports produced from November 2002.

Methods

Track Survey

The substrate of Faure Island is deep sand, providing an ideal medium for monitoring tracks. Tracks over the monitoring periods were recorded (see map 1).

Trapping

Traps (Sheffield cage traps and medium Elliott traps) were set in transect lines to get a good cover of the island. The transects covered Birrida areas, coastal spinifex dunes, acacia shrub lands and calcrete cliffs. Elliott traps were used to specifically target Shark Bay Mice, however, previous results indicated mice were also occasionally caught in Sheffield traps (placed along tracks specifically for Boodies). As reported in the previous report the new trap pins that secured the Elliott traps from Boodies were used on all Elliott traps.

Traps were baited with peanut paste, rolled oats and sardines. Because the traps are moved at regular intervals a grid system has been put in place to show locations.

Table 1. Trapping Effort:- January to June 2004 (Periods J)

Trap Type	Trap Period	No. of Traps	Nights	Trapping Effort
Sheffield Traps	27/9/04 – 7/10/04	Up to 90	10	480
Medium Elliot Traps	27/9/04 – 7/10/04	50	9	450
TOTAL				**930**

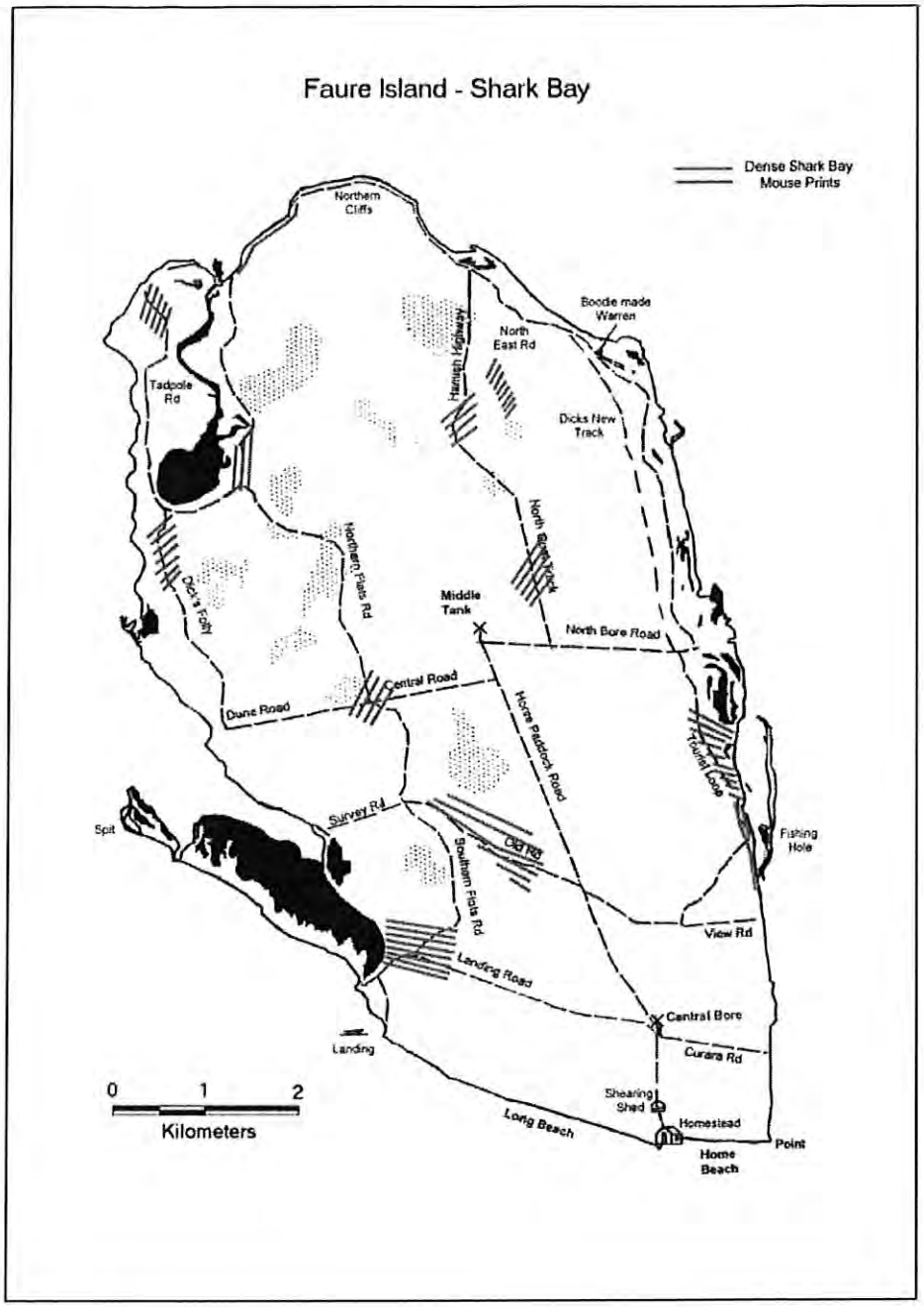
The traps were checked daily at dawn, with all animals captured processed. Processing included ID, weight, sex, breeding, general condition and removal of collars if applicable. Traps were also checked at dusk to remove any diurnal animals.

Results

Track Survey

As seen in Map 1, tracks recorded during this monitoring period indicate that SB Mice are still widely distributed across the island. The map only shows areas of dense prints, prints were recorded in low densities across much of the island.

Map 1 – Shark Bay Mouse Prints (high density)



Trapping

Table 2 summarises the trap results for this period. The full data can be seen in Appendix 2.

Table 2: Summary of trap results in this period

Trapping Effort	**930**	**Comments**
Occasions captured	8	2 Female, 5 Male, 1 unknown
No. of Individuals	8	2 Female, 5 Male, 1 unknown
New animals	8	2 Female, 5 Male, 1 unknown
Trap Success Rate	0.86%	

Discussion

Shark Bay Mice are still present on Faure Island two and a half years after the initial release. Their range is widespread, covering all the different vegetation complexes that occur on the island. Eight individuals were captured during the period. All were in good condition, with healthy weight ranges and evidence of breeding recorded. The mice are rarely re-trapped.

A trap success-rate of 0.86%, represents an increase on the previous period when the trapping success rate was (0.48%). This is comparable to the same time last year (0.51%), although lower than six months previous (1.26%). As a comparison just three House Mice were trapped during this period at a trap success-rate of 0.32%.

The system of securing Elliott traps with an 'H'-shaped rod to alleviate trap disturbance by Boodies was continued during the period and trap disturbance was significantly reduced. Shark Bay Mouse prints were often seen in close proximity to many traps without capture, lending weight to the speculation that the mice are somewhat trap shy.

A Shark Bay Mouse was also sighted while conducting spotlighting work as part of the monitoring protocol for Banded Hare-wallabies.

As shown in Map 1 Shark Bay Mice have dispersed over the entire island. For those particular areas that were monitored during the previous reporting period distribution of prints remain the same. Extensive walking between roads and tracks took place during this period whilst radio-tracking Banded Hare-wallabies, and as a result extra areas have been covered. No particularly high-density sites were noted within these areas. The density of prints overall appears to have dropped since the previous reporting period. Climatic conditions may be affecting results somewhat. Both rain and heavy dew events occurred for the duration of the monitoring period. Moisture tended to produce a hard crust on the soil, which mice tracks could not penetrate. Furthermore, Boodies now use the roads extensively making it difficult to detect Shark Bay Mouse prints. Overall, the Shark Bay Mice population on Faure Island appears to have remained stable since the last trapping period.

Shark Bay Mice will now be monitored annually as prescribed in the translocation proposal. This annual monitoring in planned for July 2005. The annual monitoring will be a standardised trap effort and will include cage traps, Elliot traps, spotlighting transects & pit fall traps. (Pitfall traps may be more successful at capturing Shark Bay Mice than Elliott and cage traps.)

Appendix 1: Shark Bay Mouse trapping data

Date	N/R	Trap	Grid Ref	Tag Type	ID	Sex	Age	Weight	Pouch	Notes
5/10/2004	N	Shearing Shed	V14		80	M	A	42		
5/10/2004	N	E015	N8		81	M	A	49		
29/09/2004	N	E036	K3		76	M	SA	40		
30/09/2004	N	E012	N4		77	M	A	53		gorgeous :)
2/10/2004	N	E021	K14		78	F	A	44	preg	
3/10/2004	N	E033	E13		79	U	A	40		
7/10/2004	N	E005	Q11		82	F	A	34		
7/10/2004	N	E022	L7		84	M	A	38		