

10 3204

BARROW ISLAND - TRIP 2 APRIL 1991

SUMMARY OF GRID MAMMAL TRAPPING

Golden Bandicoot *Isoodon auratus*

a) John Wayne Country

60 individuals trapped - 30 males : 20 adult, 10 juvenile (>150g).
30 females : 22 adult, 8 juvenile.

4/60 also trapped in April 1990 and November 1990.

26/60 trapped in November 1990.

30/60 were new captures (includes the 18 juvenile bandicoots).

This suggests that there is a relatively high turnover (50% a year) of individuals in the bandicoot population. A significant proportion (60%) of the new bandicoots in the population were juveniles from the 1990/91 summer breeding season. Only one female had a pouch young and several others had teats that had been recently used prior to April indicating a highly seasonal breeding period.

The average trap success rate (210 Elliott traps per night) was 12.2%. No bandicoots were caught in pit traps.

The mean adult male body weight was 386g; mean adult female bodyweight 321g. The adult bandicoots were in better condition than adults in November 1990. This is reflected in a 38% increase in adult body weight and an increase in the condition index (cuberoot bodyweight/hind foot) from 1.52 to 1.64.

Eight bandicoots were fitted with radio-collars, injected with either 3H/22Na/180 or 3H/22Na and released. These animals were radiotracked for 5-6 days and then recaptured. Movements of these animals appeared to be similar to that found in November 1990. Again, *Triodia angusta* clumps were used exclusively as refuge sites.

b) West Coast Highway.

Seven bandicoots were trapped (50 trapnights). All were adult with a mean body weight of 317g. All were fitted with radio-collars, injected with 3H/22Na and released. The bandicoots were radiotracked for 5-6 days and then recaptured. *Triodia angusta* clumps in the swales were used as day time refuges while the bandicoots foraged among the *T.wiseana* at night.

Western Chestnut Mouse *Pseudomys nanus*

Eighteen mice were trapped on the grid at JWC: 10 adult males and 8 adult females.

10/18 had been trapped in November 1990.

1/18 had been trapped in April 1990.

The mean body weight was 42.7g, and there was no evidence of breeding at this time.

Sixteen mice were injected with radio-isotopes: 7 with $^3\text{H}/^{22}\text{Na}/^{18}\text{O}$ and 9 with $^3\text{H}/^{22}\text{Na}$. Twelve mice were recaptured.

Common Rock-rat *Zygomys argurus*

Four rock rats were trapped: 2 of these from the cliffs and 2 from the grid itself.

All were adult males, mean body weight was 47.2g. None had been previously trapped in 1990.

All were injected with radio-isotopes: 2 with $^3\text{H}/^{22}\text{Na}/^{18}\text{O}$ and 2 with $^3\text{H}/^{22}\text{Na}$. Two animals were recaptured.

Fat-tailed Antechinus *Pseudantechinus macdonnellensis*

One adult male (27g) trapped. This animal was previously trapped in November 1990. Injected with $^3\text{H}/^{22}\text{Na}/^{18}\text{O}$, released and subsequently recaptured.

Common Planigale *Planigale maculata*

One juvenile male (2.5g) trapped in a pit trap. Injected with $^3\text{H}/^{22}\text{Na}/^{18}\text{O}$, released but not recaptured.