

Banded Hare Wallaby Reintroduction Programme – Dirk Hartog Island

During the latter part of October and early November 1973, a fire which started at the Northern end of Dorre Island resulted in the destruction of a substantial part of the vegetation on this important nature reserve.

Inspection of the island prior to Christmas 1973 showed selective destruction of the acacia thickets. These appear to have been the major habitat of the Banded Hare Wallaby.

Where remaining patches of cover were found, overcrowding was apparent. There was virtually no evidence of overcrowding and depletion of the available cover suggested an unstable situation on the island, and highlighted the vulnerability of the existing populations. It was therefore decided to spread the site if possible by attempting reintroduction of the species on Dirk Hartog Island.

At the end of the second post-fire trip to Dorre Island in June 1974, 11 Banded Hare Wallabies (four males, seven females) were captured from around the southernmost end of the burnt area in the vicinity of White Beach. These wallabies were subsequently transferred to enclosures on Dirk Hartog Island as the first stage of the attempted re-establishment programme. Six of the females had joeys in the pouch.

On October 15, 1975 a check on the Dirk Hartog Island colony revealed 25 independent animals (13 females and 12 males) including all the original adults.

On December 8, 1976 the colony had increased to 35 individuals (18 females and 17 males). It was noted that two of the original females had been lost. Another three females were lost over the period December 8, 1976-May 1, 1977.

The first stage of the programme for release to the field was commenced on May 1, 1977, when six adult wallabies (three males, three females with pouch young) were released into a four-hectare experimental enclosure near the southern end of the island.

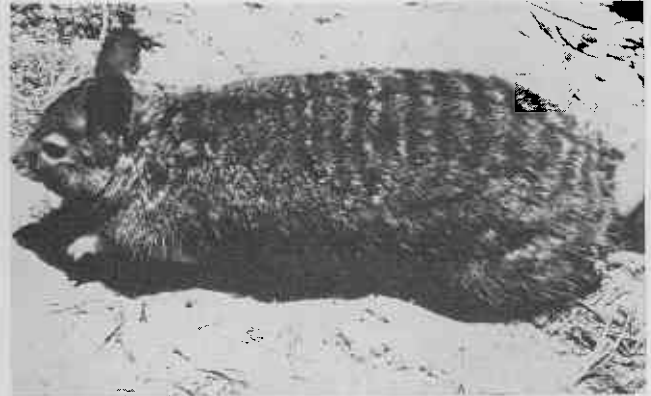
By the end of the year, two of the three females had reared their pouch young to independence.

The second stage of the release programme was commenced during June 1978 with the opening of breaches in the fence surrounding the experimental closure.

At the commencement of the second stage it was noted that the three females had large dependent young—two of the females had therefore reared a second offspring.

A further two females available from the yard colony (established in 1974) were added to this experimental group prior to breaching the fence in an attempt to compensate for the absence of any females among the young produced so far by the original three females within this group.

It was also considered desirable to have more adult females added to this group so as to further increase the population of females. As no suitable individuals were available from the yard colony, the five or six animals required will be obtained from the White Beach area on Dorre I., the source of all animals involved in this experiment to date.



A Banded Hare Wallaby being held by the stump of the tail.

All wallabies on the island were checked four times during the period January-June 1978.

In August 1978 attempts were made to get five to six animals from Dorre Island (White Beach) but due to the scarcity only two females were taken. They were then added to the remaining wallabies in the yards. The experiment continued over the summer and further checks on progress will be made in Autumn 1979.

An attempt to eliminate feral cats from Dorre island was made during February, 1978, in view of the circumstantial evidence pointing to their adverse effect on insular wallaby populations.

Baiting was the method selected, due to non-availability of other potentially more specific techniques, and "1080" was selected as the poison in view of the generally higher tolerances of birds and reptiles for this poison, in contrast with the cats, and the knowledge that indigenous mammal species in south-western Australia also appear to have increased tolerances for this compound.

Forty-five thousand specially formulated baits containing compound "1080" were laid by air over the whole island over two days.

Rainfall overnight following the first day's bait laying almost certainly reduced the potential effectiveness of the attempt, while heavy rain (*ca.* 60 mm) within six weeks of bait laying would also have rendered any remaining baits still containing "1080" completely ineffective. The eradication programme was therefore not completely successful and live cats still remain on the island.