

THE RE-INTRODUCTION OF THE BOODIE (*BETTONGIA LESUEUR*) AND THE
GOLDEN BANDICOOT (*ISOODON AURATUS*) TO THE GIBSON DESERT

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Australia's arid zone has suffered an alarming loss of native mammal fauna over the last 30-50 years, probably due to the combined effects of predation by foxes, cats, changes to traditional Aboriginal burning patterns and competition with introduced herbivores such as the rabbit.

The Department of Conservation and Land Management has a major project under way to investigate the relationship between burning, as carried out by the Aborigines, exotic predators and desert mammals. The re-introduction of species formerly abundant in this area is an integral part of these studies.

The re-introductions are being attempted partly in an attempt to gain further insight into the reason for the disappearance of the species from the deserts in the first place and partly also to develop and test possible management techniques for re-introductions of species to remote arid zone areas.

The objectives of the project are:

Scientific Objectives

To test the three hypotheses put forward to explain the decline and extinction of desert mammals:

- the changed burning pattern resulting from migration of the Aborigines;
- the introduction of predators such as the fox and cat;
- and the introduction of herbivores such as the rabbit.

To test whether animals can be successfully translocated from an island habitat to an inland desert habitat.

To further test the "pilot" animal method of reintroduction.

To develop predator/prey population model suitable for economic pest control.

Management objectives

To re-establish viable colonies of both target species in the Gibson Desert Nature Reserve.

To develop practical methods of pest control suitable for remote areas.

To develop and test methods of reintroducing mammals to remote areas.

To develop practical monitoring techniques for predator/prey population control.