

Partnering indigenous biocultural knowledge and science: Research and management of the threatened greater bilby on the Dampier Peninsula in the north-west of Australia

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The greater bilby (*Macrotis lagotis*) is an ecologically and culturally important marsupial that has disappeared from at least 80% of its former range. In the extreme northwest of this range, the Dampier Peninsula (approximately 1.6 million ha) represents a stronghold for bilby populations that, like many remaining wild bilby populations elsewhere, largely occur on Aboriginal owned and managed lands and on pastoral leases. The pindan woodland habitat on the Dampier Peninsula is very different to other localities where wild bilby populations are still found. The Western Australian Department of Parks and Wildlife together with Indigenous Ranger organisations have initiated research to determine the status of bilbies and their threats on the Peninsula, and to implement and determine the effects of management on bilby populations. The occupancy survey of bilbies commenced in late 2016 using a standardised sign plot tracking technique that also provides data on the occupancy of predators and herbivores, such as domestic and unmanaged stock, as well as habitat variables. Significant populations and threats will be identified during the occupancy survey, monitoring of key populations will be undertaken, and threat management will be initiated. The activities will be undertaken in partnership with Indigenous Rangers. Study outcomes will guide future management strategies to ensure the persistence of wild populations and in so doing reinforces the benefits and importance of engaging Indigenous Rangers and capturing Indigenous Biocultural Knowledge in research programs and management activities for threatened mammal species. Preliminary results from the occupancy survey will be presented.



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ABSTRACT BOOK