

## **Progress Report SP 1996-008**

# **Gilbert's potoroo recovery plan**

**Animal Science**

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Approved and active

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**Project Team**

granted

**Program Leader**

granted

**Directorate**

granted

# Gilbert's potoroo recovery plan

A Friend

## Context

Gilbert's potoroo is the world's rarest marsupial. The *Gilbert's Potoroo Recovery Plan 2003-2008* provides a list of actions to improve the conservation status of this Critically Endangered species. This project involves, or has involved collaborative arrangements with, Parks and Wildlife South Coast and Warren Regions, South Coast NRM, universities (Murdoch, Edith Cowan, UWA and Adelaide), the Royal Zoological Society of South Australia, the Foundation for Australia's Most Endangered Species (FAME), private sponsors and the Albany-based Gilbert's Potoroo Action Group to implement conservation actions.

## Aims

- Implement and update the *Gilbert's Potoroo Recovery Plan*.
- Increase the numbers of individual Gilbert's potoroos known to be alive in the wild and increase the number of locations in which they occur.

## Progress

- The first census of three programmed for 2015-16 of the Mount Gardner population (Two Peoples Bay Nature Reserve, TPBNR) had commenced when a lightning-induced wildfire occurred on 15<sup>th</sup> November 2015. The fire resulted in >90% reduction of suitable potoroo habitat within TPBNR where the original population had persisted. Seven potoroos were captured and taken into captivity after the fire while a safe translocation site was investigated.
- An investigation of the suitability of Michaelmas Island, near Albany, for this purpose was conducted between January and May 2016 and included flora surveys, sampling of bush rat faeces and analysis of the fungal diet, a trial translocation of two Bald Island animals to Michaelmas Island for four weeks, monitored by trapping, radio-tracking, GPS logging and further fungal diet analysis. Recommendations regarding the transfer of some of the captive potoroos to the island were submitted for approval. Additional captive animals are to be returned to TPBNR.
- A census of the translocated Bald Island population was carried out in July 2015, showing continued decline of the population, falling to 40 from 54 in July 2014. This is an expected adjustment as food resources were depleted following the rapid growth of the population between 2005 and 2012.
- The Waychinicup enclosure potoroo colony was censused twice during the year, and in May, 14 animals were captured. Predation by pythons continues to limit population growth here, despite the addition of over 40 individuals from other sites since 2010 and frequent breeding.
- An updated Recovery Plan for Gilbert's Potoroo was drafted in May 2016 and has been submitted to the Department of the Environment for comment.

## Management implications

- The establishment of two insurance populations under the Recovery Program and the earlier development of captive management protocols enabled effective management of potoroos from the TPBNR population that was impacted by fire.
- Further evidence of predation by carpet pythons in the Waychinicup enclosure requires development of python management techniques and approved guidelines.
- Translocation of potoroos to Michaelmas Island and other actions following the fire will require close management of the different colonies to maximise numbers and genetic variability.

## Future directions

- Continue monitoring populations at Bald Island and Waychinicup National Park, and survey TPBNR for persisting individuals while monitoring translocated animals. Monitor Michaelmas Island translocation.
- Support intensified fox and feral cat control at TPBNR.
- Evaluate Middle Island (Recherche Archipelago) for suitability as a translocation site for Gilbert's potoroo.