

Progress Report SP 2012-025

Barrow Island threatened and priority fauna species translocation program

Animal Science

Project Core Team

Supervising Scientist	Keith Morris
Data Custodian	Keith Morris
Site Custodian	Keith Morris

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Project Team	granted
Program Leader	granted
Directorate	granted

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A Burbidge, J Dunlop, J Angus, M Blythman, S Garretson

Context

Barrow Island Nature Reserve is one of Australia's most important conservation reserves, particularly for mammal and marine turtle conservation. It has also been the site of a producing oil field since 1964. In 2003 the Western Australian Government approved the development of the Gorgon gas field off the north west of Barrow Island, and associated LNG plant on Barrow Island, subject to several environmental offset conditions. One of these offsets was the threatened and priority fauna translocation program that provided for the translocation of selected Barrow Island fauna species to other secure island and mainland sites. This will assist in improving the conservation status of these species, and also allow the reconstruction of the fauna in some areas. It also provides an opportunity to examine the factors affecting translocation success, and improve these where necessary. Targetted species are the golden bandicoot, brushtail possum, spectacled hare-wallaby, boodie, water rat, black and white fairy-wren, and spinifex bird.

Aims

- Translocate selected mammal and bird species from Barrow Island to other secure island and mainland sites.
- Reconstruct the fauna in areas where these species have become locally extinct.
- Develop and refine protocols for fauna translocation and monitoring.

Progress

- A report on the genetic uniqueness of Barrow Island vertebrate fauna was finalised.
- The spectacled hare-wallabies on Hermite Island were monitored using a camera trap array and showed that 93% of the island was now occupied.
- The translocated black and white fairy-wrens and spinifex birds were monitored on the Montebello Islands; although numbers were down due to dry conditions, both populations are well above founder numbers.
- The LNG jetty and Materials Offloading Facility on Barrow Island were surveyed for water rats in preparation for a potential translocation to the Montebello Islands.
- Golden bandicoots and boodies translocated from Barrow Island to the fenced enclosure at Matuwa in 2010 were monitored using methodology similar to that used on Barrow Island.
- Intensive introduced predator management continued at Matuwa and Cape Range National Park.

Management implications

- Arid zone rangelands fauna reconstruction and conservation techniques developed by this project will have broad state and national application.
- The outcomes of the project are contributing to the management of DBCA and jointly managed rangeland properties and providing guidance for other fauna reconstruction projects such as the Dirk Hartog Island National Park Ecological Restoration Project.
- This project has contributed to an improvement in the conservation status of several threatened fauna taxa (e.g. boodie) and provided the basis for ongoing monitoring of fauna of the Montebello Islands.

Future directions

- Continue to implement the Barrow Island fauna translocation strategy, including the ongoing monitoring of translocated populations according to the schedule. This will include monitoring boodies and golden bandicoots on the Montebello Islands in 2019.

- Continue monitoring the effectiveness of integrated fox and feral cat baiting at Cape Range and consider a fauna translocation contingent on the effective control of introduced predators.
- Publish paper on the Barrow Island fauna translocations.