

Progress Report SP 2012-035

Conservation and management of the bilby in the Pilbara

BCS Animal Science

Project Core Team

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Update requested

Document endorsements and approvals as of Aug. 9, 2022, 1:20 p.m.

Project Team	granted
Program Leader	granted
Directorate	required

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Context

The greater bilby (*Macrotis lagotis*) is listed as vulnerable under the Commonwealth's *Environment Protection and Biodiversity Conservation Act 1999*. Increases in threats, including pressure from mining activities across the Pilbara, means that a greater understanding of the distribution, abundance and ecology of the bilby is necessary to ensure appropriate conservation and management measures are implemented. This project aims to increase our knowledge of the bilby in the Pilbara bioregion of Western Australia, and develop a regional survey and monitoring program. The current focus is to determine the distribution of the bilby in the Pilbara and to establish appropriate survey and monitoring techniques, including genetic approaches.

Aims

- Improve understanding of the distribution and demographics of bilbies in the Pilbara.
- Provide information to environmental regulators, resource development companies and contractors that will allow appropriate management to ensure the long-term persistence of the greater bilby in the Pilbara.
- Design, establish and implement a long-term monitoring program for bilbies in the Pilbara.

Progress

- A collaborative project between DBCA, Greening Australia, Roy Hill and the Warralong community continued across the 2021-2022 reporting period.
- Occupancy estimates within the Warralong Bilby Land Management Area (BLMA) derived from 2021 camera trap and 2ha plot data indicated feral cat occupancy was high ($\psi = 0.80-0.86$) in context to other recent studies conducted in the Pilbara.
- Bilby abundance estimates within the BLMA were lower in 2021 than previous estimates, partly because only one of the two known bilby colonies could be located.
- In June 2022, approximately 7000 Eradicat® baits were aerially deployed within the BLMA. Follow up surveys in 2022 will estimate feral cat occupancy and bilby abundance/occupancy.
- A review of progress against the bilby research program has commenced.

Management implications

- Improved understanding of the effectiveness of threat mitigation to benefit the bilby will help inform ongoing conservation management of the species across its range.
- Ongoing surveys for bilbies across the Pilbara will improve our understanding of their conservation status in this region and assist assessments of development proposals.

Future directions

- Continue the monitoring at Warralong to assess the effectiveness of threat management to bilbies.
- Complete a review progress against the bilby research program and identify future research directions.