Progress Report STP 2017-047 (FY 2017-2018)

Ecological Responses of the northern quoll (*Dasyurus hallucatus*) to a large-scale feral cat baiting program in the western Pilbara region, WA.

Animal Science

Project Core Team

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Update requested

Document endorsements and approvals as of July 18, 2018, 1:35 p.m.

Project Team	required
Program Leader	required
Directorate	required

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R Palmer

Progress Report

This project builds on an existing large-scale feral cat baiting and northern quoll monitoring program in the Pilbara being undertaken in partnership with Rio Tinto. The broader aims of the project are to investigate the nature of feral cat and northern quoll interactions at the landscape scale, how northern quolls may benefit from annual feral cat control, assess the impact of the baiting program on the abundance of feral cats and explore means by which baiting protocols may be optimised.

Pre and post baiting deployments of camera traps have been made across the baited and reference properties in 2016 and 2017 to calculate cat densities. Preliminary results from 2016 indicate a significant reduction in cat numbers across the baited property. Habitat surveys and description at each of the cat camera locations was been made. Demographic data has been obtained from three extended quoll trapping periods, hair and tissue samples have been collected for stress hormone analysis and genetic analysis, respectively. Development of monitoring approaches using GPS devices for northern quolls and feral cats, with the technology being novel in the case of feral cats.