Feral cat control for threatened species in Queensland

Project Summary
Project 1.1.3

Threatened Species Recovery Hub

National Environmental Science Programme

Feral cat. Photo: Joe Scanlan, QDAF

Research in Brief

This project aims to determine the effectiveness of feral cat control options, and their benefits to threatened mammals in Queensland. It will recommend long-term management strategies for feral cats in national parks.

Biosecurity Queensland is collaborating with Qld DES to assess bait effectiveness, following advice from WA Department of Biodiversity Conservation and Attractions (Eradicat bait manufacturer and label holder).

This project is investigating how cats respond to control methods including broad-scale baiting with Eradicat, and various trap types. Together with The University of Queensland, it is examining how threatened prey such as the bridled nailtail wallaby respond to this type of cat control, particularly in terms of increased juvenile wallaby survival.

Why is the research needed?

Once commonly found throughout eastern Australia, bridled nailtail wallabies suffered range and population declines after European settlement and became restricted to a small population at Taunton National Park (Scientific).

The reasons for these declines are thought to include vegetation change, competition for food and shelter, and especially predation pressure by foxes throughout their former range, and more recently dingoes and cats at Taunton (where foxes are absent).

More species are listed as threatened by cats than by any other invasive predator in Australia. Eradication of cats on the mainland is not currently feasible using available control techniques, thus we need to determine a threshold of effective control for cats, above which native prey can persist.

This will allow us to maximise the benefits to threatened species in Queensland, and determine which of the currently available control strategies provide optimal benefits to wildlife and are most cost-efficient and cost-effective in National Parks.

How will the research help?

The study will contribute to the Threatened Species strategy's aim of improving environmental management to reduce the impacts of feral cats. It aims to improve the conservation status of endangered and vulnerable mammals in Queensland that are threatened by cats.

Bridled nailtail wallabies. Photo: Bernard Dupont

The University Of Queensland AUSTRALIA

Queensland Government

Project outcomes will include:

1. data that will enable managers to decide which of the currently available cat control strategies provide optimal benefits to wildlife, and are most efficient and cost-effective in central and western Queensland national parks
2. evidence-based estimates of the prey response to feral cat control, and the recommended magnitude and timing of cat control required to provide benefits to threatened mammals in Queensland
3. potential increases in population size of mammals affected by cat predation at the bait-testing sites of Taunton and Currawinya, including bridled nailtail wallabies.

What research activities are being undertaken?

At Taunton National Park (Scientific), we collected data on recruitment and distribution of bridled nailtail wallabies before and after the Eradicat baiting program.

Capture-mark-recapture is being used to determine the impact of the cat control on bridled nailtail wallabies, in particular, the survival of young-at-foot to weaning.

Camera traps and spotlight surveys throughout the park are sampling abundance and distribution of bridled nailtail wallabies, other native fauna, and cats before and after the baiting program. This data will show if cat control is followed by an increase in abundance and area of occupancy of prey species. An Eradicat baiting experiment is also planned for Currawinya National Park.

Who is involved?

The project is a collaborative study involving Biosecurity Queensland (DAF), Queensland DES, and the University of Queensland (UQ). The feral cat control component and student support is being funded through the Queensland Government Feral Pest Initiative, Biosecurity Queensland and Queensland DES. The Threatened Species Recovery Hub and UQ also fund student support.

Female bridled nailtail wallaby
Photo: Diver Dave CC BY-SA 3.0 Wikimedia Commons

Where is the research happening?

The work will be carried out in at least two national parks in central and western Queensland.

When is the research happening?

The project will run for three years from 2016 to 2019.

Male bridled nailtail wallaby
Photo: Diver Dave CC BY-SA 3.0 Wikimedia Commons

Further Information

For more information please contact project leader:

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Australian Government

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