



Northern Australia
Environmental
Resources
Hub

National Environmental Science Programme

Kakadu National Park's threatened species

Start-up factsheet

The Challenge

There has been a dramatic decline of native animals across northern Australia over the past few decades, even in conservation reserves such as Kakadu National Park. The main drivers of biodiversity decline are due to a mix of feral cats, inappropriate fire practices and the destruction of habitats by introduced herbivores (buffalo, cattle, horses, donkeys).

Management to reduce feral cats across large open landscapes such as Kakadu is expensive and difficult. However, evidence shows improved management of fire and feral herbivores could significantly bolster the recovery of small mammals.

How will this research help?

This project will assess how native animals respond to integrated fire and feral herbivore management in Kakadu National Park. Research shows that damage to habitat from fire and grazing helps feral cats to better target their prey in open spaces. The researchers will therefore investigate how numbers of feral cats and dingos respond to these management interventions. The project will also evaluate the

potential to implement this type of management more broadly in northern Australia.

Kakadu National Park is managed jointly by its Aboriginal Traditional Owners and Parks Australia. It's therefore important for researchers to identify how integrated fire and feral animal management may maintain or recover populations of culturally important species.





How will the research be carried out?

Working with Traditional Owners, Parks Australia will seek to manage fire to reduce its extent and frequency. They will also reduce numbers of feral herbivores. This integrated management will be undertaken in discrete areas of the Park, with a focus on habitats where significant mammal declines have been recorded and where these threats are most severe.

Researchers will then monitor the response of biodiversity to the changed fire regimes and control measures and evaluate the effectiveness of this integrated management for recovery of threatened species in the park and similar northern Australian landscapes.



Who is involved?

This is a collaborative project between the NESP Northern Australia Environmental Resources Hub and the Threatened Species Recovery Hub, the Northern Territory Department of Land Resource Management and Kakadu National Park.

The project will be led by Northern Territory Government Director of Terrestrial Ecosystems Graeme Gillespie.

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Left: Feral buffalo, photo: Samantha Setterfield. Above: Controlled fire in Kakadu National Park, photo: Michael Douglas. Front page, top: populations of the blackfooted tree rat have declined significantly in Kakadu National Park, photo: Alaric Fisher. Bottom: Feral cat captured on a motion detection camera, photo: Flora and Fauna Division, DLRM.



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