



Northern Australia
Environmental
Resources
Hub

National Environmental Science Programme

Defining metrics of success for feral animal management in northern Australia

Start-up factsheet

The Challenge

Feral animals are a major threat to the ecological and economic values of northern Australia. Feral livestock, particularly pigs, as well as cattle, horses and buffalo wreak havoc on the natural environment, displace native species and threaten agricultural production.

Millions of dollars have been and continue to be invested in feral animal management programs. Unfortunately, these programs are rarely linked to quantified long term outcomes for environmental and cultural assets.

In addition to the issue of effective control methods, Indigenous groups have raised concerns about the damage feral animals inflict on rivers, wetlands and estuaries. Turtles, water lilies, and crocodile eggs are among the traditional resources being impacted. Adding to the complexity of this problem is the desire from Traditional Owners to preserve populations of feral pigs and buffalo as a readily available source of meat for remote communities.



Before and after: these photos demonstrate the damage caused to wetlands when feral pigs and cattle aren't excluded. Photo: Kalan Enterprises. Top image: feral pigs. Photo: Samantha Setterfield



How will this research help?

The research will explore the extent of the damage being caused by feral animals to aquatic ecosystems and the methods to best control them. The researchers will work with Indigenous ranger groups, local communities and agencies to achieve this goal. By ensuring that all key management groups are involved in the project, the researchers aim to foster a shared understanding of the most effective and efficient ways to manage feral animals to deliver joint social, environmental and cultural benefits.

This project builds on and works alongside state and federal funding programs that have been awarded to Indigenous groups Balkanu, Aak Puul Ngantam (APN) and Kalan Enterprises over the past five years to control feral animals in Cape York's Archer River Basin. With support from Balkanu and funding awarded through the Australian Government's Biodiversity Fund, Kalan and APN rangers installed

pig exclusion fencing around key wetlands and compared the results to unfenced sites.

This NESP project will add value to the continued management of feral pigs by ranger groups by providing a very high standard of scientific support. The NESP team will work closely with APN and Kalan to develop a joint understanding of what works and what doesn't in both the feral animal management and monitoring and evaluation space. This will provide important information that will help design relevant monitoring methods and reporting frameworks that can be shared with other land managers across northern Australia.

Where is the research happening?

Field research is taking place in the Archer River Basin, which flows from the McIlwraith Range to the west coast, in the mid part of Queensland's Cape York Peninsula.



Kalan rangers learning how to collect soil samples, which will be used to demonstrate changes to wetlands following pig exclusion. Photo: Justin Perry

Left: Kalan rangers completing annual wetland monitoring at one of the fenced lagoons near Coen as part of the Balkanu led feral pig project. Photo: Michael Lawrence-Taylor

Who is involved?

The project will be led by Justin Perry from the CSIRO. Dr Perry will be supported by researchers from CSIRO, James Cook University and the Queensland Government.

Kalan, APN and Balkanu are essential project collaborators on this NESP project. They will conduct extensive feral animal management activities in the region for the next two years as part of their funding through the Balkanu Feral Pig Management project, Nest To Ocean, Working On Country and Queensland Land and Sea Management funding.

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