



Marine
and Coastal

National Environmental Science Program

PROJECT 4.5

Developing Integrated Pest Management for feral pigs

The challenge

Large populations of feral pigs roam northern Australia damaging important places and disrupting ecosystems and native species. Up to 90% depredation of Olive Ridely marine turtle eggs have been recorded on Cape York Peninsula in far north Queensland, and their activities in coastal wetlands undermine substrate structure and release greenhouse gases. The annual cost of feral pig damage to the north is estimated at \$87 million.

Pig control efforts across northern Australia are ad-hoc and small-scale and as a result have had little long-term impact on overall population size. According to scientists, this is because at least 70% of the total pig population needs to be culled annually for a meaningful effect on numbers. This has not been achieved to date and more effective control methods supported by science are needed.

This project will develop and trial an Integrated Pest Management (IPM) approach to feral pig control at selected coastal sites, with associated monitoring. IPM involves the use of a range of complimentary science-based actions and has proven effective elsewhere for control of pest species.

The approach

The IPM methodology for feral pigs will be developed collaboratively with stakeholders and experts, and implemented by Indigenous Land and Sea management organisations at up to three case study sites. Research and monitoring will determine the effectiveness of the work.

Components of the work IPM include:

- studies of feral pig ecology and behaviour;
- quantification of feral pig impacts on specific values in each case study region;
- development and testing of management strategies and surveillance methods;
- integration of ecological, cultural, social and infrastructure factors within the IPM methodology;
- monitoring of key native species to assess recovery responses to control efforts; and,
- provision of advice and evidence to support up-scaling across different tenures and jurisdictions.

Expected outcomes

- A better understanding of the impacts of feral pigs to inform regional planning. Research that specifically addressed knowledge gaps to inform the implementation of national priorities identified in the national feral pig action plan and the feral pig threat abatement plan.
- Indigenous research, monitoring and land management priorities addressed, and management capacity increased through alignment and collaboration with federal and state funding for feral pig management.
- Coastal protection and restoration progressed.
- Values affected by feral pigs within coastal and adjacent marine systems quantified.
- Establishing effective monitoring to quantify the effectiveness of feral pig control activities and the associated ecosystem responses.

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FRONT: Feral pig. BACK: (Top) Feral pig walking along fence line. (Bottom) Assessing greenhouse gas emissions from damaged wetland soils. Photo by A Pearse.