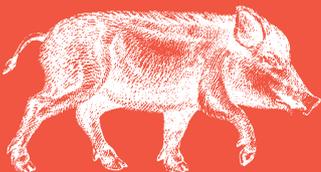


Photo sourced from Department of Agriculture, Fisheries and Forestry

PROSPECTUS

NATIONAL COORDINATION, LOCAL ACTION



NATIONAL
FERAL PIG
ACTION PLAN

FEBRUARY
2023



WORKING TOGETHER

The National Feral Pig Action Plan is seeking support – from national, state, territory and local governments, industry groups, environmental and natural resource organisations, public and private land managers, research organisation and philanthropists – to tackle the ongoing and incidious problems caused by feral pigs.

Financial investment and in-kind contributions are an invaluable to actively progress work to reduce feral pig impacts, which include:

- On-ground collaborative management of feral pigs by public and private land managers
- Measuring and monitoring impacts and/or population changes over time
- Increasing capability and capacity of land managers to apply integrated best practice management practices and monitoring tools
- Find innovative solutions to improve the effectiveness and efficiency of feral pig management programs through research and development

We need to work together. Let's talk about how to do this to have the biggest impact.

FOREWORD

Statement from
Ricky Archer,
Chair, NFPAP
Implementation
Committee



I hope this Prospectus impresses upon you the urgent need for continued investment to bolster the coordinated, collaborative and contemporary approaches being taken to reduce impacts from feral pigs, advocated by the National Feral Pig Action Plan.

This is a matter of national significance to safeguard Australia's unique biodiversity and ecosystems, minimise biosecurity risks and protect cultural values from feral pigs.

I encourage you to contact us to discuss how your investment could be best directed to benefit the many communities, and landscapes, across Australia being impacted by feral pigs.

Feral pigs are one of Australia's worst vertebrate pest species and inhabit up to 45 per cent of the continent.

In many areas across Australia, feral pigs continue to cause extensive and destructive impacts to our unique environment, agricultural industries, cultural values and social assets.

From environmental degradation, agricultural damage, biodiversity and cultural heritage loss, risks to biosecurity through to contributions to greenhouse gas emissions, feral pigs cause many millions of dollars of harm each year.

We cannot afford to ignore these threats.

Despite many efforts by land managers, sustained reductions in feral pig impacts and their populations are not being broadly achieved.

This means that we cannot sit idly by and use the same approaches.

Australia is a vast country. Scale is incredibly important.

The **National Feral Pig Action Plan 2021-2031** (the Plan) builds on, and complements, years of local management initiatives and research undertaken across Australia, involving private land managers, non-government organisations, scientists, and governments. The Plan promotes national coordination of collaborative feral pig management on a landscape-scale, cross-tenure basis. It is encouraging stakeholders to work together in community-led groups to humanely suppress – and in some cases, eradicate – populations of this incredibly destructive pest species to protect assets by 2031.

Make no mistake; controlling feral pig populations is challenging and far from simple. Control is costly and long term.

Feral pigs are intelligent animals.

Strategic and timely use of humane, integrated best practice management need to be applied by groups of land managers. Longevity in resourcing and stakeholder involvement in coordinated community-led management programs is critically needed. Achieving this would be a game changer. It would empower land managers to work more proactively together, unify efforts of all land managers at a regional level, strengthen programs, and importantly,, enable significant and lasting benefits to be delivered.

As custodians of the land we work, live and play on, we are obliged to protect and preserve it for future generations.

To achieve this, we need your help.

THE PROBLEM

Right now, populations of feral pigs are exploding in response to plentiful water and feed.

Under favourable conditions, feral pig populations can rapidly recover or exceed their original population size within 12 months. To address this, at least 70 per cent of the feral pig population must be removed annually.

Feral pigs are very mobile in the landscape, and highly adaptive to different environments.

These factors sets feral pigs apart from other large herbivore species – their populations are difficult, costly and time-consuming to control.

Land managers proactively working together at a landscape-scale is the best approach for their management – but only 5% of landholders participate in local community groups.

FAILING TO MITIGATE THIS SIGNIFICANT AND ONGOING THREAT WILL CONTINUE TO CAUSE:



Our environment

- Loss of native flora and fauna
- Reduced vegetative cover
- Impacts to water quality
- Damage to wetlands and floodplain ecosystems
- Erosion, sedimentation and land disturbance
- Weed and disease transmission
- Carbon emissions from disturbed soils and habitat loss



Agricultural sector

- Crop destruction
- Damage to arable land
- Predation of livestock
- Growth performance of livestock
- Infrastructure damage, including fences, drainage and water troughs
- Water and feed contamination
- Weed and disease transmission



Cultural assets

- Impacts on Indigenous communities, cultural practices and social fabric
- Damage to cultural sites
- Loss of cultural heritage
- Impacts on cultural values
- Ecosystem and biodiversity loss
- Impacts on tourism



FERAL PIG IMPACTS

Feral pigs threaten:



146 species of threatened flora and fauna



8 ecological communities

Economic and environmental losses from feral pigs are not insignificant.

**\$47 MILLION
IN DAMAGES**

to agriculture in 2020/21 from feral pigs was estimated in northwest NSW¹ alone.

**\$40 MILLION
IN LOSSES**

in the Whitsunday² region to both environmental and agricultural assets in 2020.

If no control is conducted, feral pig populations can increase by **86%** in one year.

Risks to Australia's biosecurity status are exacerbated by feral pigs, due to their ability to spread exotic, endemic and zoonotic diseases to domestic livestock, wildlife, plants and humans.

Economic, trade and market access impacts from an exotic disease incursion would devastate Australia's economy, and our \$80 billion agricultural sector.

Climate change impacts

Globally, feral pigs contribute 4.9 million metric tonnes of CO₂ emissions/year³.

Australia needs networks of well resourced, locally coordinated feral pig management groups working tirelessly together, using best practice management, to transform this situation and to overcome these impacts.

The NFPAP is working with our stakeholders to deliver this.

This is an enormous task.

We cannot achieve this with current available resources.

1 AgEcon (2021). Economic impact of feral pigs on agricultural production in North West NSW: 2020-21. Accessed at: https://www.lls.nsw.gov.au/__data/assets/pdf_file/0005/1385033/20-21-Seasonal-impact-of-feral-pigs-NW-LLS-Report.pdf

2 Fuller, B. and Hardy, S. (2022). Project report: Progress on the Whitsunday Regional Council Feral Animal Aerial Shooting Program. Whitsunday Regional Council. Accessed at: <https://feralpigs.com.au/wp-content/uploads/2022/05/Project-Report-Whitsunday-Regional-Council-Feral-Animal-Aerial-Shooting-Program-Update.pdf>

3 O'Bryan, C. J., Patton, N. R., Hone, J., Lewis, J. S., Berdejo-Espinola, V., Risch, D. R., Holden, M.H. and McDonald-Madden, E. (2021). Unrecognized threat to global soil carbon by a widespread invasive species. *Global Change Biology*, 00. 1-6. <https://doi.org/10.1111/gcb.15769>

Photo sourced from MidWest Biosecurity Group, WA





BENEFITS BEING ACHIEVED FROM COORDINATED AND STRATEGIC BEST PRACTICE MANAGEMENT

\$18.83

return for every \$1 spent
on feral pig management in
Whitsunday region in 2020/21

43,608 PIGS

removed from the
Western Riverina region
between 2016 and 2022

<30

feral pigs remaining
on Kangaroo Island as
at February 2023

4,844 PIGS

removed in aerial control
programs across northern
WA wheatbelt in 2022

10%

average turtle nest
predation rate by feral pigs,
wild dogs and goannas on
western Cape York (down
from >90%) in 2021

CALL TO ACTION

We are working collaboratively with the many community groups around Australia dealing with feral pig issues to adapt their management and monitoring strategies and address ongoing challenges. Relationships with governments, natural resource management agencies, Indigenous groups, primary producers, and many others are being strengthened to progress this.

Through the Plan, cooperation, coordination and collaboration between geographically disparate land managers is being enabled. This is allowing new relationships and networks to be created, new insights and approaches to feral pig management and monitoring to be unearthed, and knowledge to be shared.

Additional momentum for the Plan's implementation would be generated by the appointment of regional feral pig coordinators located in strategic feral pig "hot-spot" areas to stimulate collaborative catchment-scale programs.

Information detailing specific benefits from effective feral pig management across different types of assets is key to engaging and motivating private and public land managers, communities and wider stakeholders to work proactively together. However, this data is not readily available or known.

The routine collection of practical and meaningful data is essential in feral pig management strategies to:

- understand where, when, how and why pigs move in the landscape
- target control efforts to optimise efficacy of control programs
- drive continuous improvement in feral pig management programs
- define expected net benefits to be delivered by the control actions undertaken by each group and
- answer the "what's in it for me?" question for each member.

It's important that clearly defined endpoints are included in all feral pig management plans to set goals and measure progress.

All of these gaps need to be filled and better supported.

Knowing the number of feral pigs removed, without knowledge of the baseline population and measuring the damage being caused, is of little to no value.

WHAT'S NEEDED:

1

Longevity in resourcing and operations of coordinated community-led feral pig management groups, enabling ongoing land manager participation.

2

Engaged local communities and sustained collaborations between public and private land managers in coordinated, community-led groups.

3

Quantification of impacts and net benefits from feral pig best practice management programs to land managers, informed by consistent monitoring and reporting.

4

Increased effectiveness of control programs reducing feral pig impacts and populations.

5

Better local information to target where, when and how to control feral pigs in the landscape, informed through effective use of existing and new technologies.

WHAT'S BEING ACHIEVED

Our initial cohort of six demonstration sites were set up in December 2021 to assist with the Plan's implementation.

Each of these sites are protecting different types of assets and involve diverse groups of public and private stakeholders working together to reduce impacts from feral pigs.

These sites are being used to show others what approaches and technologies are being used, share learnings of what worked and what hasn't, how land managers are being engaged, costs of programs and most importantly, build connections between people dealing with feral pigs.

A selection of these demonstration sites are highlighted below.



Photo sourced from Carpentaria Land Council Aboriginal Corporation

CLCAC RANGER PROGRAM

Carpentaria Land Council Aboriginal Corporation (CLCAC) protects the rights and interests of nine Traditional Owner groups in the lower Gulf of Carpentaria. As an extension to its role as a native title service body, CLCAC supports a Land and Environment Ranger Program which delivers management activities that enhance the protection and management of natural resources in the lower Gulf region for the long-term benefit of Traditional Owners and communities.

More than 120,000 feral pigs across pastoral leases and Indigenous owned properties have been destroyed by the CLCAC's Rangers since the program commenced in 2011, which has protected native flora and fauna species and agricultural properties across the region.

Feral pig populations are widespread and abundant across the Gulf region, presenting significant biosecurity risks to Australia due to its remoteness and expanse. Whilst consistent and ongoing control to curtail population growth and manage impacts to environmental, agricultural and cultural assets is essential, the program is fully dependent on fee-for-service contracts which has curtailed recent activity.

Through their Indigenous Land and Sea Ranger Groups, the CLCAC facilitates internal capability and capacity development in best practice feral pig management of their Rangers. These training programs enable accredited Rangers to plan, manage and undertake feral pig population surveys using fixed wing aircraft, aerial culling, thermal ground shooting as well as aerial baiting (on contract for Carpentaria and Burke Shire Councils) on a fee-for-service basis.

The CLCAC recognises that future programs must be regionally focussed, at catchment scale and with defined endpoints, with all collaborating stakeholders across the region co-investing and working cohesively together.

MIDWEST FERAL PIG DEMONSTRATION SITE

The Midwest Feral Pig Demonstration site in the northern agricultural zone of Western Australia involves three Recognised Biosecurity Groups (RBG), Northern Biosecurity Group (NBG), Central Wheatbelt Biosecurity Association (CWBA) and Midlands Biosecurity Group (MBG) working together to coordinate their vertebrate pest management activities.

The three RBG's manage populations of their priority declared pests across a combined area of 100,000 km².

Feral pigs in this region are a biosecurity risk to the intensive cropping and livestock region as well as damaging crops, fencing and predation of livestock. They also threaten environmental and social assets including the vulnerable malleefowl.

These RBG's work closely with their community to raise awareness of feral pigs and best practice management techniques to reduce impacts of feral pigs in the region.

A Declared Pest Rate is raised by the State from landholders in specific areas and these are then matched dollar for dollar by the State. Declared Pest Rates are subsequently used to contract Licensed Pest Management Technicians (LPMT) to work with local landholders and the community to conduct coordinated baiting, trapping and aerial culling activities across the Midwest region.

In 2022, 4,844 pigs were removed in four aerial control programs from the Midwest demonstration site at a combined cost of \$136,971.

The capacity of land managers to effectively control expanding feral pig populations in the vast region is being increasingly constrained by the limited resources available.

WHITSUNDAY REGIONAL MANAGEMENT PROGRAM

Five regional councils in Queensland, namely the Whitsunday, Isaac, Burdekin, Mackay and Charters Towers Regional Councils, are working collaboratively across an area of approximately 982,000ha.

In the region, feral pigs cause impacts to coastal wetlands and other environmental assets, agricultural industries including sugar cane, horticultural and livestock production, and tourism.

The program is coordinated by the Whitsunday Regional Council and primarily involves aerial culling across 16 feral pig management areas. Each participating land holder in the region contributes \$300 per aerial shoot, regardless of land size. In 2020/21, 1,990 pigs were removed at a cost of \$225,000 (including in-kind). The aerial culling program is supported by on-ground management actions including ground baiting and trapping.

Extensive efforts to obtain co-investment from a range of stakeholders, including local and State governments, regional NRM groups, stakeholders and 89 participating landholders is undertaken annually. The area covered by the program is limited by funding availability and time required to attract additional funding support.

Stakeholder investment, including by local government, into this program has been successfully demonstrated through a commissioned cost benefit analysis. Benefits being delivered by the Whitsunday Regional Council's Aerial Shooting Program are clear.

This work identified a combined economic and environmental return on the removal of feral pigs at more than \$4.2 million for 2020/21 – returning \$18.83 to agriculture and the environment for every dollar spent in the region on feral pig management.

KANGAROO ISLAND

Sitting just off the South Australian mainland, Kangaroo Island is a delicate isolated ecosystem which has been negatively impacted since the introduction of feral pigs 200 years ago.

In 2017, it was estimated that feral pigs caused local farmers upwards of \$1 million in damage each year.

The 2019-20 bushfires devastated much of Kangaroo Island's landscape. This presented a unique opportunity to eradicate the remaining feral pig population on the western half of Kangaroo Island, an estimated 1,000 feral pigs.

The Kangaroo Island Feral Pig Eradication Program commenced in October 2020 and is on track for completion by June 2023.

A total of \$5.6 million has been obtained through the South Australian and Australian Government Disaster Recovery Funding Arrangements and Local Economic Recovery Funds under the National Bushfire Recovery Fund.

A robust, integrated and innovative strategy is being applied to eradicate feral pigs supported by eradication modelling. Innovative tools being used in combination include, thermal assisted aerial culling (TAAC), HOGGONE baiting, an extensive field camera surveillance network, thermal ground shooting and trapping.

Supported by strong community engagement, it is now highly likely that the program's eradication target will be achieved by June 2023 – saving farmers and communities millions of dollars and protecting Kangaroo Island's fragile local environment.

Through proving the effectiveness of control strategies to achieve desired outcomes, this project is demonstrating that it is possible to attract significant funding to resource planned activities adequately and deliver an ambitious, time-bound objective.

HINCHINBROOK COMMUNITY FERAL PIG MANAGEMENT PROGRAM

This multi-stakeholder funded, community-based feral pig control program has been operating since 2009, with an annual budget of approximately \$140,000. Funds are contributed by the sugarcane industry (funded by Herbert Cane Productivity Services Limited), Hinchinbrook Shire Council, Queensland Government (for coastal national park and unallocated land), Terrain Natural Resource Management and HQ Plantations. Concerns over program longevity are increasing as access to funding from partners remains a major challenge.

The Herbert River district in north Queensland produces around 5 million tonnes of sugarcane per year. Ground baiting, using bananas (or mangoes) as a carrier for 1080 is primarily used by land managers to remove feral pigs, followed by trapping and aerial shooting. Aerial shooting is being conducted biannually, in winter and summer, covering 10,000 ha of coastal wetland habitat to protect Green and Flatback turtle nesting sites from feral pigs. Through the implementation of a coordinated and integrated feral pig management program, annual losses to cane growers from cane damage have been reduced from \$1.2 million per year to approximately \$250,000. These costs do not include damage caused by feral pigs to infrastructure, drainage, land and habitat degradation issues, water quality impacts to the Great Barrier Reef and costs associated with re-laser levelling of cane fields.

Innovative approaches to identify and control feral pigs continue to be sought by the Hinchinbrook Community Feral Pig Management Program to better deal with growing populations of feral pigs in the region. Whilst local knowledge of feral pig presence, movement patterns and boundaries would assist with optimising management strategies for their effective control, such information is scant.

The program successfully obtained funding from Round 6 of the Queensland Feral Pest Initiative to assess the use of thermal imaging cameras and drone technology to identify feral pigs present in wetland vegetation and to estimate their abundance. Learnings from this work will be shared with other management groups as they becomes available. The capacity of land managers to effectively control expanding feral pig populations in the region is being increasingly constrained by the limited resources available.



WILD OTWAYS INITIATIVE

Victoria's Otway Ranges are situated 162 kilometres southwest of Melbourne and are one of Australia's most biodiverse regions, home to hundreds of unique flora and fauna species.

Feral pigs (and other vertebrate pests) present an existential threat to native vegetation and wildlife in this ecosystem.

The Wild Otways Initiative, funded by the Australian Government, is being delivered by Corangamite Catchment Management Authority, with the feral pig and deer component led by the Conservation Ecology Centre. A coordinated and collaborative management approach to combat threats from feral pigs is being applied to engage the many private and public landowners involved.

Local landowners are being engaged through partnerships with Landcare to share knowledge about feral pig (and deer) management and impacts in the region, facilitate workshops, and instruct how to use FeralScan and HogEye camera systems.

Combinations of remote trapping, HOGGONE baiting and ground shooting of trap or bait shy pigs are being strategically utilised to control feral pig populations. Tools including GPS collars, field camera networks, environmental DNA testing of waterways, FeralScan and infra-red aerial monitoring surveys are being used to inform and improve control efforts.

This three year program is scheduled for completion in June 2023. Further support is needed to enable lasting legacies from this work to be realised.

OUR GOALS

With secure longer-term funding in place to support local programs, the involvement and commitment by land managers to work collectively in coordinated groups to reduce feral pig threats will be enhanced.

BY
2024

- Increased numbers of locally coordinated management groups that are well supported by engaged land managers
- Monitoring tools are routinely used by land managers to collect data to assess effectiveness of control programs in reducing feral pig impacts and/or populations
- Adaptive management plans with clear endpoints are in place, informed by monitoring
- Regional coordinators appointed in prioritised areas, enabling catchment-scale feral pig management
- Feral pig management is embedded into whole farm planning of agricultural land managers
- Increased recognition of skills, knowledge and operations of Indigenous Ranger groups driving new opportunities to deliver feral pig control services

BY
2026

- Engaged, coordinated, committed and well-resourced networks of stakeholder groups conducting strategic and effective best practice management programs
- Investment mechanisms developed that incentivise land managers to actively manage feral pig impacts
- Methods, tools and systems in place for land managers to report and analyse monitoring data, identify local populations in the landscape and improve decision making of best practice management actions to inform strategic, humane feral pig management decisions
- Increased area covered by coordinated feral pig management groups
- Stakeholder satisfaction with outcomes being delivered

BY
2031

- Impacts of feral pigs to environmental, agricultural, cultural and social assets are actively suppressed through maintenance of low feral pig populations
- Functional investment models are in place that incentivise land managers to routinely undertake coordinated and collaborative feral pig control programs
- Expansive and connected networks of coordinated community-led management groups
- Social licence maintained for feral pig management actions by land managers
- Sustained employment to actively suppress feral pig impacts



Photo sourced from Whitsunday Regional Council



HOW THE NFPAP WILL WORK WITH YOU

With your support, management groups will be better placed to make clear commitments to reduce impacts caused by feral pigs to targeted assets.

We will help identify program/s for you that:

- address the asset you are looking to protect or
- would benefit from your support, and
- deliver measurable and clear returns on investment.

There are many programs focussed on delivering:



Environmental, conservation and biodiversity benefits



Agricultural benefits



Protection of cultural and social assets

The need for ongoing collaborative and cross-tenure management programs that effectively and efficiently protect targeted assets from feral pigs cannot be overstated.

This way, long term national benefits will be able to be clearly demonstrated.

YOUR OPPORTUNITY TO MAKE A LASTING DIFFERENCE

We've achieved a great deal since the Plan's endorsement by the National Biosecurity Committee in October 2021. We are actively supporting many locally coordinated groups and sharing details of applied best practice management across Australia.

However, our work is only just beginning.

We must move beyond short-term, reactive programs that typically only deliver temporary respite.

As a matter of national significance, it is imperative that our environmental, agricultural, cultural and social assets are protected from feral pigs into the future.

We know that this can be achieved with a concerted, longer term commitment, focusing on delivering sustained on ground benefits to reduce impacts from feral pigs.

Your support would enable more sustained resourcing of long term on-ground feral pig management program(s) that align with your goals and priorities.

Your assistance would result in:

- Consistent practical and ongoing management actions – through direct funding and/or in-kind resources.
- Lasting and extended collaborations between public and private land managers, regions, sectors, and communities.

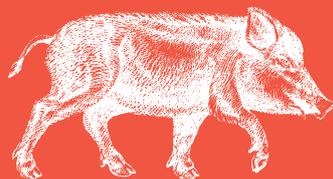
There are many opportunities for you to partner with many different organisations around Australia to build upon and enhance feral pig management programs being conducted by community-led groups.

Together, we can achieve the ambitious vision of the National Feral Pig Action Plan by 2031.

Please talk to us about where and how you can have the biggest impact – because ultimately, that's what we are all about.

CONTACT US:

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**NATIONAL
FERAL PIG**

ACTION PLAN

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