



CENTRE FOR
INVASIVE SPECIES SOLUTIONS

PLANNING GUIDE FOR **FERAL CAT** MANAGEMENT IN AUSTRALIA

For Land Managers, Community Groups, Pest Control
Professionals, and Biosecurity Organisations



www.pestsmart.org.au

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Australian Government

Front cover photo: Tony Buckmaster.

Back cover photo: Conservation detection dog used to find cats. Michael Johnston

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Photo: Joe Scanlan

INTRODUCTION

Feral cats have been implicated in extinctions and serious declines of Australian native animals and caused difficulties for threatened species reintroduction programs. At a meeting of Environment Ministers in October 2022, ministers agreed to better manage invasive species that are threatening protected biodiversity, including to advance the uptake of technologies for the control of feral cats.¹⁹

Feral cats prey upon a wide range of mammals, birds, reptiles, amphibians and insects. They represent an ongoing predation threat to vulnerable and endangered native fauna. Feral cats may also carry diseases such as toxoplasmosis and sarcosporidiosis which can affect livestock, native mammals and birds and humans.

Feral cats are the same species as domestic cats (*Felis catus*). They were introduced to Australia, mainly as pets, following European settlement. Cats accompanied people as colonial settlements and farms were established across Australia. By the end of the nineteenth century they had spread into the bush and were present in most Australian habitats.

Feral cats are categorised differently to stray cats and domestic cats as they live, hunt and breed entirely in the wild. Legislation also varies between these three categories.

Environment ministers have also noted that where effective and humane techniques are available to control feral cats, they should be used in coordination with other pest animal control activities to benefit threatened species.

This has led some states to declare feral cats as serious pest animals and subject to control.

Feral cat control is undertaken by state and territory agencies on public land, but we all have a responsibility to manage them. Farmers, private conservation land managers, local governments, natural resource management organisations and community groups all have a strong stake in controlling feral cats.

ABOUT THIS GUIDE

The Centre for Invasive Species Solutions has produced this guide to help individuals, groups and organisations wanting to control feral cats to identify the problem, determine the reasons for control and to step through a simple process to prepare effective plans for cat management.

The guide provides a decision template to prepare, implement and evaluate a feral cat management plan.

Supporting information is provided in this document to assist the plan preparation with links to more detailed information such as the [Glovebox Guide for Managing Feral Cats](#)¹ featured on the PestSmart website.

The recommended approach is to work through the questions and decisions contained in the guide step by step.

DECISION TEMPLATE

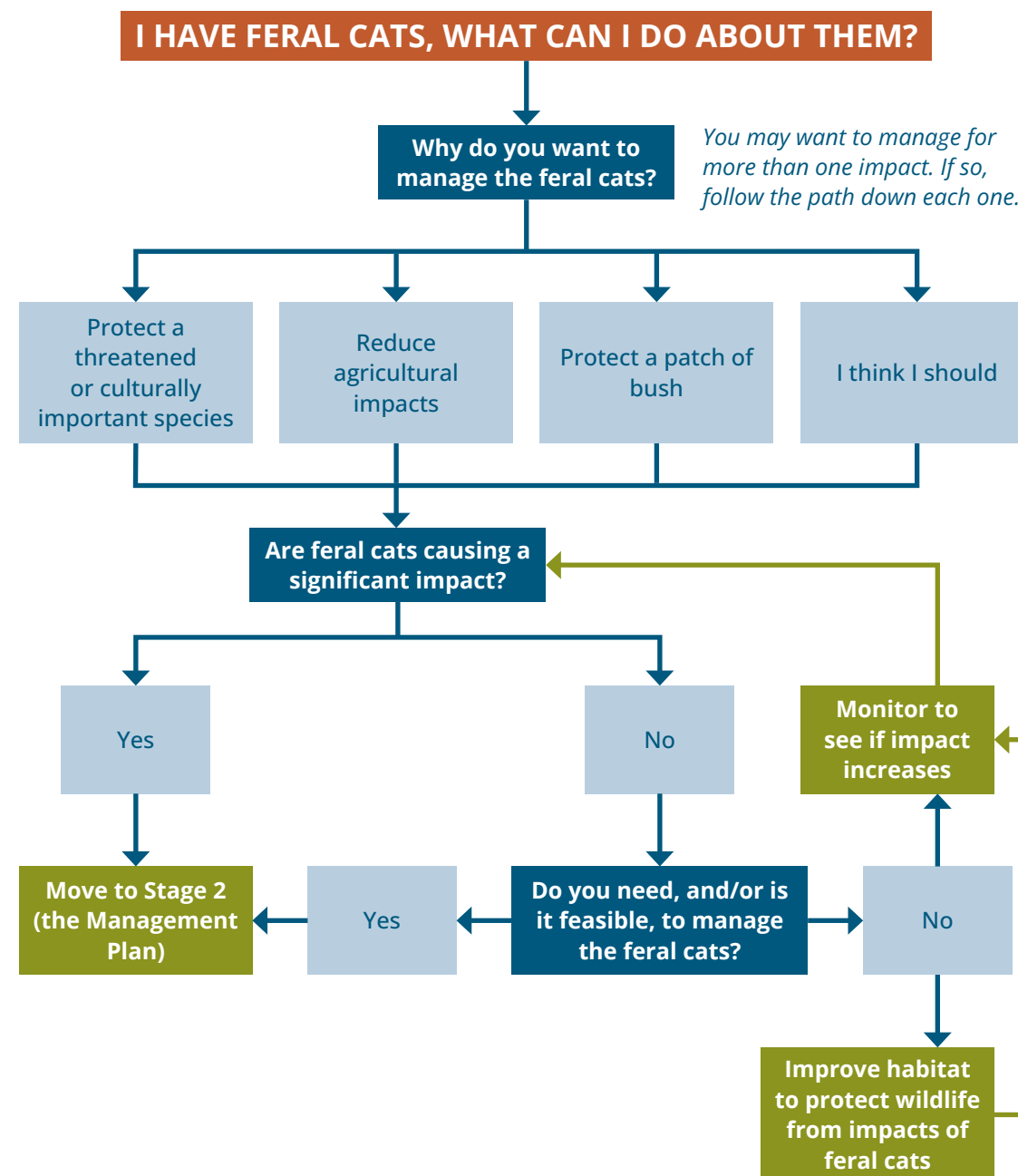


Figure 1 Flow diagram for individuals, groups and organisations to help clarify why they want to manage feral cats and whether a control program is needed.

STAGE 2 (THE MANAGEMENT PLAN)

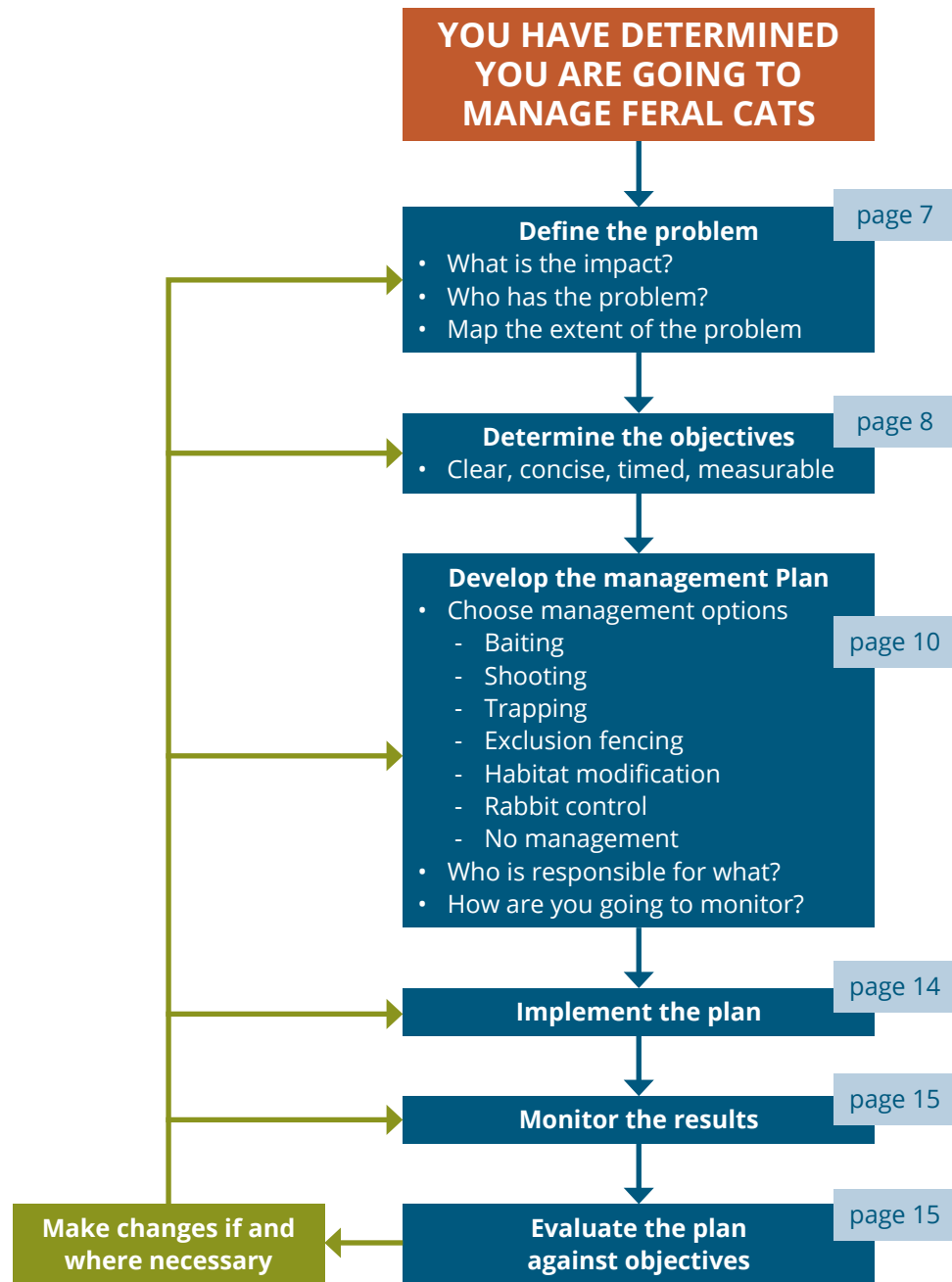


Figure 2 Decision tree for individuals, groups and organisations wanting to develop an effective feral cat management plan and control program

DEFINE THE PROBLEM

What is the actual issue? Why do you want to manage feral cats? If there is evidence that feral cats are involved, define the problem.

Reported sightings of feral cats and concerns of community members, land managers, invasive animal control operators and Landcare/NRM groups? Yes — define the problem.

Reported impacts on native species? What are the species? Can you quantify the impacts with estimates of population decline? Is there evidence of feral cats being involved such as photographs and DNA evidence? Yes — define the problem.

Reported impacts of toxoplasma in sheep, goats, pigs or poultry? Identify the impacts: loss of unborn lambs due to abortions in ewes resulting in a reduced birth rates and lamb marking percentage. Note that in goat and pig farming operations birth rates can be similarly affected. The health of poultry can be severely affected but is more likely for backyard poultry than commercial production.

Reported impacts of sarcocystis in sheep with significant reductions from cysts recorded at the abattoir? Determine the impact in terms of dollars lost.

Define the problem clearly. This is not just that you have seen feral cats, but rather what is the damage that they are doing that you want to manage. For example, it may be environmental concerns such as numbers of native animals in your area or on your property have declined, you want to protect a population of a threatened or other native species likely to be killed by feral cats, or there is a wildlife re-introduction program that needs to be protected. Or it might be there has been an increase in aborted lambs, kid goats or piglets on your or your neighbour's property. Or it might be community concerns.



Once one of the most widespread mammals in Australia, predation by cats and foxes was a major factor in the Boodie, or Burrowing Bettong, (*Bettongia lesueur lesueur*) going extinct on the mainland.

Photo: Gill Basnett

Once you have defined the problem you need to consider:

- Who has the problem / is affected? It might not be just you. Talk to others, for example: your neighbours, local agency staff, NRM and Landcare groups or pest controllers.
- Where is the problem? With the aid of maps and records locate where the problem is occurring. Where are cats most sighted? Where are you finding the most evidence of kills? Where is the threatened species you are wanting to protect? Where are your sheep most vulnerable when pregnant?
- How severe is the problem and how critical?

If a management plan is required to deal with the feral cat problem, who needs to be involved in developing a plan? What are your feral cat management objectives? What are the actions involved (integrating a range of measures works best)? Who will be responsible for carrying out the actions? And who will be accountable for making sure the actions are carried out?

Who will take responsibility for leading the feral cat management plan?

Who is the key individual or group that will take responsibility for bringing together everyone who has a key interest in addressing the feral cat problem? Identify everyone who should be involved.

What are your feral cat management objectives?

What does your group want to achieve? Objectives should be defined as desired outcomes. If feral cats are impacting on farming businesses due to veterinary confirmed toxoplasma and sarcocystis what change is desired? For example, in sheep production the objective may be to increase the percentage of stock with live births over a certain period of time. In red meat production, the objective may be to reduce the volume of meat rejected due to sarcocystis by a desired percentage.

For wildlife conservation, the objective needs to specify the native species being targeted and the population increased sought.

Worthwhile tests of your objectives are:

- *Specific* — do the objectives specify what exactly will be accomplished by whom, where and why?
- *Measurable* — how will success be demonstrated? This could be a percentage increase in the lamb marking rate or a percentage increase in the population of a threatened native species.
- *Achievable* — can the objectives be achieved within the resources and capabilities of the group responsible? Or can you get help in achieving them?
- *Relevant* — do the objectives relate to the group or individual's key responsibilities? Does it link to the objectives of other broader plans?
- *Time-based* — do the objectives specify the timeframe in which the objectives expect to be achieved?

Can you coordinate your feral cat management plan with other feral cat management programs in place or planned?

Feral cat management is most successful when coordinated, strategic, and implemented across a broad area using an 'integrated pest management' approach that makes use of all suitable control tools. If baiting is not an available option, then a targeted approach needs to be taken. Coordinating your management program with others will deliver better outcomes for everyone.

Check if other land managers, agencies or organisations are undertaking, or planning to undertake, feral cat management in your area:

- Neighbours
- Local pest management or biosecurity group
- Local Government
- [State/Territory Government](#)²
- [Natural Resource Management Organisation](#)³
- Local or state Landcare group



Photo: Neil Walker

What is your plan to deal with the problem?

Decide whether your plan aims to:

- Eradicate feral cats in a defined area. Note: feral cats are hard to detect and eradication is extremely difficult unless you are on an island or within an appropriately fenced area and that un-desexed local domestic cats, kept as pets or farm cats, can provide a source population for future feral cats.
- Contain the feral cat problem to an acceptable level defined by the group.
- Undertake sustained management of feral cat impacts.
- Target management on key impacts.
- Undertake one-off action to deal with a serious issue.
- Just monitor the feral cat situation for the time being.

Outline the detail of your plan (including your selection of control options):

- Specific actions that will be undertaken.
- Who will do what, when, how and where?
- How will the actions be coordinated and integrated to achieve the management objectives?
- How will assess outcomes of the plan?



Photo: Paul Martin



Photo: Gill Basnett

ASSESS CONTROL OPTIONS

PREREQUISITES

Understand feral cat behaviour to help you decide what is most appropriate for control measures. [Refer to SUPPORTING INFORMATION \(pages 16–23\)](#).

- Read the [Glovebox Guide for Managing Feral Cats](#)¹.
- Read the [Model code of practice for the humane control of feral cats](#)⁴ and the Humaneness, Efficacy, Cost-effectiveness and Target Specificity of Feral Cat Control Methods.
- Contact relevant federal, state or territory government agencies before undertaking feral cat control to ensure compliance with regulations and the required permits are put in place [Connect — PestSmart](#)².
- Assess relevant control measures and select those that are: humane, target feral cats with minimal impact on native wildlife and other non-target animals, effective in achieving plan objectives and efficient with the use of available resources.



Photo: Craig Steel



Cat in a cage trap. Photo: Gill Basnett

INTEGRATED PEST MANAGEMENT

The best outcomes are achieved when an 'integrated pest management' approach, that combines the use of all suitable control tools, is undertaken. Some tools are more effective at rapid knock down of feral cats on a broad scale, in a cost-effective way, but may not be available for use in your area, while others may help with mop up, targeting problem animals, smaller scales or ongoing management after the initial knockdown.

Indirect management options, such as improving wildlife habitat or reducing key prey animals such as rabbits, are also options. These measures will not rapidly reduce feral cat numbers but may reduce their impacts.

TRAPPING

Trapping feral cats is labour intensive and time consuming. Generally, the technique is most suited to relatively small areas. *Only use traps when you can check them within 24 hours of being set.*

Feral cats can be hard to trap and discussing trapping techniques with an expert in the area will greatly increase the chances of a successful trapping campaign.

Cage traps can be effective in urban and semi-urban areas, or rubbish tips as cats are more accustomed to moving in and out of man-made objects. They are less effective in more remote bushland settings, as feral cats can be wary of man-made structures.

Leghold traps can often be more effective than cage traps but they may have unintended consequence for non-target animals and are not legal for use on cats in all states and territories.

[Refer to SUPPORTING INFORMATION \(pages 16–23\)](#) on trapping options. Read Standard Operating Procedures [GEN003](#)⁵ (soft net traps), [CAT002](#)⁶ (cages) and [CAT003](#)⁷ (leghold padded jaw).

If you plan to use trapping as part of your feral cat management plan be sure to outline:

- The circumstances in which trapping will be used.
- Who is responsible?
- What will be done with the cats and other animals caught, and who is responsible?
- Locations where traps are placed — use GPS, FeralCatScan, or another appropriate tool and make sure you have permission from the land owner/manager.
- Dates when trapping will be used.
- State or territory regulations on trapping checked and required permits obtained.
- Training requirements checked and undertaken if required.
- Sourcing of required traps.

- Personal safety and animal welfare briefing conducted before use. Includes euthanising methods for trapped cats.
- Record trapping activities in [FeralCatScan](#)⁸.

GROUND SHOOTING

Best suited to localised feral cat problems in reasonably open areas and integrated with other control measures as feral cats are very hard to detect and shoot in areas of medium to high levels of vegetation. It is time consuming, and labour intensive, so not suitable for landscape scale control. A highly skilled shooter is required to ensure a quick and humane death. The use of thermal scopes can increase success.

[Refer to SUPPORTING INFORMATION \(pages 16–23\)](#) on shooting. Read Standard Operating Procedure [CAT001](#)⁹ (ground shooting). If it is to be adopted in your feral cat management plan outline:

- Circumstances in which shooting will be used.
- Who is responsible for managing and undertaking a shooting program?
- Availability of qualified, licenced and accredited shooters (can include professional and voluntary) with appropriate licenses, firearms and scopes, ammunition, spotlights and safety equipment.
- Locations in which shooting will take place (ensure you have permission from land owner/manager).
- Dates on which shooting is undertaken.
- Personal safety and animal welfare briefing conducted before use.
- Record shooting activities in [FeralCatScan](#)⁸.

POISON BAITING

Poison baiting is generally the most successful method suitable for feral cat control over a large area and landscape. Feral cats prefer live prey and, unlike foxes and wild dogs, do not regularly scavenge for food. To be effective, baiting must be undertaken at a time when feral cats are food stressed and are more likely to scavenge for baits (for example, in winter or extended droughts).

Options for baiting are the [Curiosity[®]](#) bait (right) with Para-aminopropiophenone (PAPP) as the toxin or Eradicat[®] (Sodium fluoroacetate — 1080). Note at the time of publication, Eradicat[®] (below) was only registered for use in Western Australia but was going through the approval process for national registration, so it is worth seeing if you can use it in your state/territory.

Refer to [SUPPORTING INFORMATION \(pages 16–23\)](#) on poison baiting. For Curiosity[®], read Standard Operating Procedure [CAT004¹¹](#), Eradicat[®] Standard Operating Procedure to be developed. Contact [state or territory regulators²](#) and the bait supplier Tréidlia Biovet for information and ordering at Curiosity@feralcat.com.au or phone 02 9674 1488. Contact WA Department of Biodiversity, Conservation and Attractions ecosystemhealth@dbca.wa.gov.au for information on Eradicat[®].



Eradicat[®] bait.

Photo: Department of Biodiversity, Conservation and Attractions, Western Australia.



Curiosity[®] baits. Photo: Georgia Kerr

If baits are to be used, outline:

- Who is responsible?
- Has training been completed as required for Schedule 7 toxins? Curiosity[®] and Eradicat[®] baits can only be sold to, and used by, appropriately trained and authorised persons. State and territory government authorities may also apply additional restrictions.
- Have permits been obtained if required?
- Locations or areas of bait placement planned. (Ensure you have permission from land owner/manager).
- Dates of baiting.
- Baits sourced from Tréidlia Biovet (Curiosity[®]) or WA Department of Biodiversity, Conservation and Attractions (Eradicat[®]).
- Record baiting activities in [FeralCatScan⁸](#).



Protect working and pet dogs from accidental poisoning by using a muzzle when they are off lead. Photo: Greg Mifsud

FELIXER GROOMING TRAP

The Felixer is an automated feral cat grooming trap that uses LiDAR beams to detect the movement and shape of a cat walking in front of the unit, before firing a measured dose of toxin (1080) onto the fur of the feral cat. This is then ingested by the cat as they groom. The units can be set up and left for longer periods of time (months) than other forms of traps because cats and other wildlife are not physically caught in the device. Maintenance and monitoring of the unit is important to ensure they are working effectively, lenses are clean and solar panel is unobstructed. Felixers store up to 20 sealed cartridges that are fired individually on target cats. Photographs are taken by the Felixer every time the detection beams are crossed, allowing for easy monitoring of target and non-target species. Felixers can be useful in areas less frequently visited, known cat corridors or other key spots in the landscape.

Felixer Grooming Traps are fairly new technology and there are some restrictions around their use. Make sure you follow all the directions on the label and any approval permits.

Contact the manufacturer, [Thylation¹²](#) for more information and to hire units. If the Felixer grooming trap is to be used, outline:

- Who is responsible?
- New trial site registered with state/territory or regional biosecurity officers.
- [Felixer Manual¹³](#) read.
- [Online training¹⁴](#) completed.
- Lease agreement with Thylation completed.
- Felixer cartridges ordered under permit.
- Felixer placement locations planned and recorded. (Ensure you have permission from land owner/manager).
- Dates placed.
- Record Felixer use in [FeralCatScan⁸](#).

EXCLUSION FENCING

Expensive. Usually only undertaken in high conservation areas or where subsidies have been available. Requires ongoing monitoring and maintenance to be effective. Feral cats and other invasive pests still need to be removed from inside the fence.

- Read the [Cost Effective Feral Animal Exclusion Fencing for Areas of High Conservation Value in Australia¹⁵](#) report along with the [catalogue of fence designs¹⁶](#) including combined fox, feral cat and feral rabbit fences.
- Obtain fencing design and advice from exclusion fencing suppliers and/or specialist contractors.
- Consider whether exclusion fencing is a viable and feasible option.

If you include exclusion fencing in your feral cat management plan, you need to outline:

- Who is responsible for managing the fencing program?
- Location of fences.
- Dates of construction.
- How negative impacts to other species affected by the fence will be reduced?
- Maintenance schedule.
- Fence monitoring methods.
- Data recorded in [FeralCatScan⁸](#).



Felixer grooming trap set up on fire trail. Photo: Gill Basnett

WILDLIFE HABITAT MANAGEMENT

There will be times that lethal control measures are not available or suitable. Improving habitat can increase the survival of wildlife, even in the presence of feral cats, as it provides more food and shelter options for the native animals. This will not remove the problem of feral cats but may reduce their impacts. Habitat management options include:

- Revegetation
- Weed control
- Fire management
- Artificial habitat such as appropriately designed nest boxes or floating islands.

RABBIT CONTROL

Rabbits are a major food source for feral cats. When rabbit numbers are low, feral cat numbers are also generally low, so controlling rabbits can help control feral cats. There is evidence that when rabbit haemorrhagic disease virus significantly reduced the rabbit population in areas of South Australia, the feral cat numbers also dropped after a lag period. By decreasing the amount of alternative food available, rabbit control can also increase the effectiveness of feral cat control programs.



Controlling rabbits can reduce feral cat numbers.
Photo: Rick Nash and Invasive Animals CRC

IMPLEMENT YOUR PLAN

Establish a planning calendar to ensure jobs get done at the right time. For example, access training and permits before trying to get baits, or starting your trapping program well before lambing or target wildlife breeding seasons.

- Record:
 - What is to be done and when, across multiple control methods.
 - Where actions are to be carried out.
 - Persons or groups accountable and responsible for certain actions, coordination of effort among participants.
- Access the resources, equipment and materials required for the plan.
- Communicate your activities with neighbours or others involved or ensure effective coordinated efforts.
- Implement and record the actions.

HOW TO MONITOR RESULTS AND EVALUATE YOUR PLAN

Has the plan achieved your objectives or do changes need to be made?

It is important to monitor the progress of your feral cat management plan and evaluate its effectiveness against the objectives during and/or at the end of the program. Has the plan achieved your objectives or do changes need to be made?

It is recommended that [FeralCatScan](#)⁸ be used for collecting evidence of feral cats (for example, sightings, tracks and scats or stock and wildlife kills), and control activities (for example, baiting or trapping along with, where possible, what was caught or who took baits). This data should be recorded during the preparation and implementation of your feral cat management plan.

Decide on other methods of monitoring to determine the outcome of the plan against your objectives (for example, the percentage of ewes/nannies with live births, decreased amount of meat rejected by abattoirs, or increase in target native species numbers). If your objectives are focused on wildlife recovery, it is strongly recommended you talk to an expert in wildlife monitoring to work out the most suitable monitoring methods for you.

Monitor regularly enough to determine whether your objectives are being met, not just at the end of the program.

Monitor the operational cost of the program.



Motion sensor cameras are a useful tool for monitoring feral cat and wildlife activity.
Photo: Gill Basnett

Undertake a review of results against objectives at least annually:

- Are you meeting your objectives?
 - Effectiveness of the measures in meeting the stated objectives of the plan. Are your control measures working or do you need to change how these are applied? For example, if your trapping program is not working, do you need to change the timing, number, type or placement of your traps?
 - Appropriateness of the measures taken to achieve the objectives of the plan. Are your control measures working or do you need to change method(s) of control? For example, should your ground shooting program be complemented with the use of baits?
 - Were resources used efficiently or are there more efficient ways of using resources to meet objectives?
- Based on the monitoring of results and the evaluation against the objectives of the plan, what, if anything, needs to be changed going forward?
- [FeralCatScan](#)⁸ is recommended for data recording during the preparation and implementation of your feral cat management plan.

SUPPORTING INFORMATION

The [Glovebox Guide for Managing Feral Cats](#)¹ featured on the PestSmart website is a comprehensive guide providing detailed information on feral cat management.

The [Model code of practice for the humane control of feral cats](#)⁴ should be closely considered in addition to relevant Standard Operating Procedures for feral cat control methods.

National and local advice on feral cat management can be obtained from the Centre for Invasive Species Solutions' [National Feral Cat and Fox Management Coordinator](#)¹⁷. The Coordinator works with local, regional and state communities and stakeholders to raise awareness of feral cats and foxes to improve best practice control methods and their outcomes.



Photo: Luke Foster

WHAT IS THE ISSUE? IF THERE IS EVIDENCE THAT FERAL CATS ARE INVOLVED, DEFINE THE PROBLEM

Putting the effort in upfront to define the problem and describe the impacts of feral cats is essential to establishing effective management strategies and control methods.

Key aspects to identify and define include:

- The actual problem such as the loss of specific species of native wildlife or scans of ewes and goats to show aborted young with feral cats confirmed as a contributing cause.
- The area in which the problem has been confirmed.
- Groups and individuals who have a stake in feral cat management and need to participate.

With feral cats, this is not an easy task. While there is considerable research on the historical impacts of feral cats on wildlife, quantifying present feral cat populations and loss of wildlife due to their presence is difficult. Feral cat populations vary considerably with seasonal conditions and the availability of food sources. When prey is abundant, cat populations may increase rapidly, but when food becomes scarce, they typically decrease.

It is worth checking with your local or state/territory authorities, regional natural resource management bodies, land managers and local pest control groups authorities to see if they have more data on feral cat abundance and impacts for your area that is available for use. However, as cats are often unmanaged this may not be the case.

The impact of feral cats on wildlife can also be monitored through motion sensor cameras, sand plots and DNA analysis of hair and scat collections. These techniques can also help determine population densities pre and post control, dispersal distances and optimal management areas.

IDENTIFY WHO SHOULD BE INVOLVED IN YOUR PLAN

Contacting your neighbours — to see if they have a feral cat management plan or are undertaking any control measures — can help ensure these measures are coordinated across a wider area, and therefore likely to be more effective. Or they might want to join in with your plan.

Check whether any management programs are in place at the state/territory government, local government and/or regional level. This will allow group or individual property plans to be linked to the broader plans.

Contact details for regional natural resource management bodies can be accessed at [NRM Regions Australia](#)³.

Existing local biosecurity or Landcare groups should also be contacted about their plans for feral cat control or other pest animal activities.

You can also set up a private group of registered FeralScan users to share information on your feral cat management program.

SETTING OBJECTIVES

Once you have established that your problem is caused by feral cats, you need to think about what you want your feral cat management plan to achieve.

The best objectives are clear, measurable and time bound.

Objectives should specify the outcomes sought, such as reducing the impact of feral cats on livestock, native wildlife, or both. For example, the greatest feral cat impacts on livestock tend to be during pregnancy. So, your objective could be increasing the number of lamb live births by 10% over 2 years. This will then determine the methods required to achieve this objective.

For wildlife conservation, the objective would need to specify the native species being protected, the increase in the population being sought, the area of habitat being protected, and the timeframe involved.

For example, a 10% increase in the population of Southern Brown Bandicoots over 12 months following the implementation of feral cat management.

PREPARE AN INTEGRATED MANAGEMENT PLAN FOR THE CONTROL OF FERAL CATS

Once the problem has been defined, and objectives set, a plan of action is required.

Research and long experience show that feral cat control requires an integrated pest management approach. The best outcomes are achieved with a range of control techniques being undertaken at the same, or different times, during the life of your plan — rather than one technique implemented once, or continuously over a long time.

Planning is essential for dealing with feral cat issues. Random and one-off measures will be ineffective.

Plans can be developed by community groups or individual land managers coordinating with neighbours and broader plans.

CHOOSE CONTROL MEASURES

Select control measures that are the most humane, target specific and cost-effective available. To date, for feral cats, these are trapping, ground shooting, baiting, exclusion fencing, rabbit control and habitat management.

Understanding feral cat behaviour will help you decide which are the most appropriate control measures.

Feral cats are solitary animals that range across landscapes in search of food and shelter. When food is abundant, such as a large rabbit population, feral cats will have relatively small ranges but when food sources become scarcer they can range over large areas.

Feral cats live in a diverse range of habitats including arid areas, forests, woodlands, grasslands and even urban areas over most of Australia. So, it can be safely assumed that some feral cats will be present in most areas. The key issue is to identify environmental, agricultural and other impacts that you want to manage.

Feral cats are highly proficient hunters and prefer hunting in open areas close to shelter. When conditions are cooler, they will hunt in the early morning and evening as well as at night. In hotter areas and conditions, they primarily hunt at night. This means shooting is more effective at night and trapping will capture more animals.

Feral cats are carnivores, preferring to eat fresh animals that they kill. When rabbits are abundant they are a key food source, but as their populations decline, feral cats will target more native animals. This may not have a significant impact on native wildlife populations but is important to consider, especially for threatened species with low numbers. Control of rabbit populations is likely to make baiting more effective.

Feral cats are opportunistic hunters and kill what is readily available including mammals, birds, reptiles, amphibians, and insects. When food is scarce feral cats may eat carrion and in peri-urban and urban areas they inhabit rubbish dumps that are not enclosed.

Individual feral cats may become specialist hunters that prefer some species over others such as birds and reptiles. If this can be identified, then these animals should become targets of control programs.

Feral cat populations vary considerably with environmental conditions and food sources. They are strong breeders with litters of up to eight. This means when conditions are right feral cat populations can quickly re-establish and on-going management is necessary.

Prior to choosing control methods read the [Model code of practice for the humane control of feral cats](#)⁴ and its table of Humaneness, Efficacy, Cost-effectiveness and Target Specificity of Fox Control Methods. Also check what methods are legally available to you in your state/territory and circumstances, as this varies.



Padded-jaw leghold traps are a useful tool for feral cat control.

Photo: Tony Buckmaster

Trapping

There are several trapping methods:

- Soft net traps. Refer to Standard Operating Procedure [GEN003](#)⁵.
- Cage traps. Refer to Standard Operating Procedure [CAT002](#)⁶.
- Leghold traps with padded-jaws. Refer to Standard Operating Procedure [CAT003](#)⁷.

Check with relevant state or territory agencies to make sure your trapping method is permitted for use. For example, leghold traps are restricted in several states.

Humane and successful trapping requires training and experience, so it is necessary to check training requirements and associated regulations. It is also vital that someone is able to check the trap within 24 hours, and you have a humane plan for anything you catch.

In urban/residential areas, cage traps are preferred over leghold traps as fewer injuries are sustained, non-target animals can be released unharmed and trapped feral cats can be transported to a facility or away from the area for euthanasia (or if possible, adoption). This is often the case in rural and bushland settings too.

Leghold, padded-jaw traps should only be used at sites where the animal can be killed by shooting whilst still held in the trap.

It may also be that different types of traps are used at different times of year.

Trapping has the advantage over shooting and baiting in that if domestic cats with collars or microchips are captured, they can be returned to owners or an animal rescue centre.

All types of traps are available and can be sourced through internet searches or rural suppliers. Make sure you get sturdy cage traps because cats have been known to bust out of flimsy ones.

Ground shooting of feral cats

Refer to Standard Operating Procedure [CAT001](#)⁹.

Shooting can result in a localised reduction in feral cat numbers, but is ineffective in significantly reducing feral cat populations, particularly over the longer-term.

Another issue with shooting at random sightings is that it is difficult to tell whether the cat is a feral, stray or domestic pet unless the cat's behaviour has been properly observed.

Cats wearing collars should not be shot. It is recommended that landholders and neighbours be notified before commencement of a feral cat shooting operation so that they can take measures to protect their domestic cats.

Shooting can be a humane and effective control measure where trained, licenced, accredited and skilled shooters are available. Shooters must possess suitable rifles with scopes, ammunition, spotlights and safety equipment. Refer to Standard Operating Procedure [CAT001](#)⁹.

Firearm users must strictly observe all relevant safety guidelines relating to firearm ownership, possession and use. Shooters should be familiar with the [National Firearms Safety Code](#)¹⁸.

Shooting is best undertaken at night when feral cats are more active, requiring the use of spotlights or thermal scopes. Advice on products available can be obtained from specialist hunting suppliers, gun stores or internet searches.

Animal welfare must also be considered and managed. When shooting an animal, it must be clearly visible and able to be killed with a single shot causing instantaneous death.

Shots to the head (brain) are preferred over chest shots (heart/lung) as they are more likely to cause instantaneous loss of consciousness. Chest shots may not render the animals instantly insensible and may result in a higher incidence of wounding. However, an accurate chest shot may be easier than a head shot. Shooting at other parts of the body is unacceptable. Refer to [CAT001](#)⁹ for correct shot placement.

If lactating females are shot, reasonable efforts should be made to find dependent kittens and kill them quickly and humanely.

Poison baiting

Meat baits are generally less reliable for feral cats than wild dogs and foxes. The first preference of feral cats is fresh prey and they will generally only eat baits or carrion when food is scarce. As such, baiting works best for feral cat control when there is low prey availability (for example, during winter or periods of drought).

Baiting is the preferred control measure over large areas particularly those that are difficult to access.

Two types of baits are available: Curiosity® and Eradecat®. They are designed to target feral cats and limit risks to native species.

The Curiosity® bait is a skinless sausage containing a small hard plastic pellet, which contains the toxin PAPP. The pellet is designed to dissolve in the stomach of the feral cat who tend to swallow large chunks of food (they do not have grinding molars).

Research demonstrates that most native animals will reject the plastic pellet as they tend to nibble and chew their food. Care still needs to be made in placement of baits so that cats are the most likely target. Curiosity® baits can only be used when temperatures will not get above 16 degrees.

If considering the use of baiting, Curiosity® Standard Operating Procedure [CAT004](#)¹¹ for baiting feral cats with PAPP should be read.

Eradecat® is a small highly palatable sausage bait containing 1080. Currently, Eradecat® is only registered for use in Western Australia, but at the time of publication, was going through the approval process for national registration, so it is worth seeing if you can use it in your State/Territory.

Felixer grooming traps

A recent innovation in feral cat control that should be considered is the Felixer grooming trap, a humane and automated tool to help control and reduce the number of feral cats.

This was developed and patented by Ecological Horizons supported by several NGOs and government grants and is now being commercialised by the non-for-profit company [Thylation](#)¹².

Felixers use rangefinder sensors to distinguish target cats from non-target wildlife and humans, and spray targets with a measured dose of toxic 1080 gel. Cats are fastidious groomers and ingest the gel while grooming. New models (V3.2) Felixers include an artificial intelligent camera to make them more effective at distinguishing between target and non-target species.

The units take photos of everything that triggers the sensors and provides data on which animals were targeted and those that were not. Felixers can be used in photo-only mode to undertake risk assessments before arming them with 1080.

Felixers can only be leased from Thylation and are available for a minimum 3-month lease period which can be extended on a monthly or annual basis. Ordering the gel cartridges requires a 1080 use permit. For more information on the units, how to lease them and online training, contact Thylation.

Exclusion fencing

Generally, the high cost of establishing and maintaining feral cat-proof enclosures has limited their use to the management of highly valued threatened or endangered species.

Exclusion fencing is expensive in terms of materials and labour for construction and maintenance so must be carefully assessed, designed and constructed.

Fencing must also be adequately maintained and monitored to stop cats breaching the enclosure.

Exclusion fencing can have negative effects on non-target species by altering dispersion and foraging patterns. However, these issues can be overcome by movement corridors. You will also need a plan to ensure genetic viability of native species within the fenced area and ways of controlling any population issues that might arise.

Where more than one pest is a problem, such as feral cats, foxes, wild dogs, feral pigs and rabbits, then the fence design needs to be suitable to exclude the relevant pests. This increases its cost.

The [Cost Effective Feral Animal Exclusion Fencing for Areas of High Conservation Value in Australia](#)¹⁵ report of the Natural Heritage Trust provides detailed advice for land conservation managers. It includes a [catalogue of fence designs](#)¹⁶, including combined fox, feral cat and feral rabbit fences.

Some fencing contractors specialise in exclusion fencing and are a valuable source of advice on designs and costs.

Habitat management

Feral cats are generally nocturnal and will rest during the day in den sites such as hollow logs, piles of debris such as stones, or rabbit warrens. Farmers can counter resting opportunities by removing rubbish piles, filling in rabbit warrens, and removing woody weed infestations such as blackberry clumps on their properties. These are also good places on farms to concentrate control methods such as setting traps. Care must be taken not to remove important habitat for native wildlife, particularly threatened species.



Photo: Gill Basnett

USE FERALCATSCAN TO RECORD DATA, MONITOR RESULTS AND EVALUATE YOUR PLAN

[FeralCatScan](#)⁸ is a free online resource for landholders, community groups, pest control professionals, and biosecurity organisations.

Users can download the app on their mobile devices from Apple App Store or Google Play.

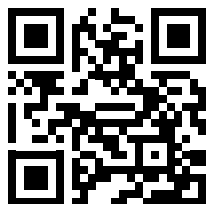
When the app is opened the first time, users can register an account and login to the app.

FeralCatScan can be used for recording and mapping:

- Evidence of feral cat presence such as sightings, footprints, scats or monitoring camera photos.
- Evidence of feral cat impacts such killings or attacks on native wildlife captured on monitoring cameras.
- Alerts to the group of new cat sightings in the area.
- Control activities undertaken.

Registered users of FeralCatScan are able to establish a private group, such as stakeholders involved in your Feral Cat Management Plan, to share information and maps. This enables land managers and pest control officers to be kept informed of feral cats and activities in your area.

feralSCAN 



Scan code to go to [Feralscan.org.au](https://feralscan.org.au)

MONITOR AND EVALUATE YOUR MANAGEMENT PLAN

Information recorded in FeralCatScan and through other project monitoring can assist in observing and checking on the progress of your plan.

Evaluation of the implemented plan should take place periodically (for example, six-monthly or yearly) and should include an assessment of the following key aspects:

- Appropriateness of the measures taken to achieve the objectives of the plan.
- Effectiveness of the measures in meeting the objectives of the plan.
- Were resources used efficiently or are there better ways of using resources to meet objectives?

Are there others who should be involved in the program?



Photo: Gill Basnett

LINKS TO MORE INFORMATION

- ¹ Glovebox Guide for Managing Feral Cats (pestsmart.org.au) <https://pestsmart.org.au/wp-content/uploads/sites/3/2021/02/CISS-Glovebox-Guide-Cat-web.pdf>
- ² Connect — PestSmart <https://pestsmart.org.au/connect/>
- ³ NRM Regions Australia <https://nrmregionsaustralia.com.au/>
- ⁴ Model code of practice for the humane control of feral cats (pestsmart.org.au) <https://pestsmart.org.au/toolkit-resource/code-of-practice-feral-cats/>
- ⁵ GEN003 — Trapping of feral cats using soft net traps Standard Operating Practice (pestsmart.org.au) <https://pestsmart.org.au/wp-content/uploads/sites/3/2021/02/GEN003-SOP.pdf>
- ⁶ CAT002 — Trapping of feral cats using cage traps Standard Operating Practice (pestsmart.org.au) <https://pestsmart.org.au/wp-content/uploads/sites/3/2020/12/CAT002-SOP.pdf>
- ⁷ CAT003 — Trapping of feral cats using padded-jaw traps Standard Operating Practice (pestsmart.org.au) <https://pestsmart.org.au/wp-content/uploads/sites/3/2020/12/CAT003-SOP.pdf>
- ⁸ FeralCatScan (feralscan.org.au) <https://feralscan.org.au/feralcatscan/default.aspx>
- ⁹ CAT001 — Ground shooting of feral cats Standard Operating Practice (pestsmart.org.au) <https://pestsmart.org.au/wp-content/uploads/sites/3/2020/12/CAT001-SOP.pdf>
- ¹⁰ Curiosity[®] bait for feral cats - DCCEEW <https://www.dcceew.gov.au/environment/invasive-species/feral-animals-australia/feral-cats/curiosity-bait>
- ¹¹ CAT004 — Baiting of feral cats with para-aminopropiophenone (PAPP) Standard Operating Practice (pestsmart.org.au) <https://pestsmart.org.au/toolkit-resource/baiting-of-feral-cats-with-papp/>
- ¹² Thylation <https://thylation.com/>
- ¹³ Felixer User Manual (thylation.com) https://thylation.com/wp-content/uploads/2022/05/User-Manual-MK3.1_F.pdf
- ¹⁴ Felixer Training (thylation.com) <https://induction.thylation.com/felixer/>
- ¹⁵ Cost effective feral animal exclusion fencing for areas of high conservation value in Australia ([dcceew.gov.au](https://www.dcceew.gov.au)) <https://www.dcceew.gov.au/sites/default/files/documents/fencing.pdf>
- ¹⁶ Catalogue of designs ([dcceew.gov.au](https://www.dcceew.gov.au)) <https://www.dcceew.gov.au/environment/invasive-species/publications/cost-effective-feral-animal-exclusion-fencing>
- ¹⁷ National Feral Cat and Fox Management Coordinator (<https://www.feralscan.org.au/>) https://www.feralscan.org.au/feralcatscan/pagecontent.aspx?page=cat_nationalcoordination
- ¹⁸ National Firearms Safety Code (nt.gov.au) https://pfes.nt.gov.au/sites/default/files/uploads/files/2019/National_Firearms_Safety_Code_1.pdf
- ¹⁹ DCCEEW: Feral Cats <https://www.dcceew.gov.au/environment/invasive-species/feral-animals-australia/feral-cats>

VISIT OUR FERAL CAT TOOLKIT

<https://pestsmart.org.au/toolkits/feral-cats/>

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