

The Greater Adelaide Peri-Urban Feral Deer Eradication Plan





This Plan has been prepared by the Peri-Urban Feral Deer Working Group, with representatives from Landscapes Hills and Fleurieu, Green Adelaide, Department of Primary Industries and Regions, Department for Environment and Water, SA Water, Adelaide Hills Council, and City of Onkaparinga, with the support of The National Feral Deer Action Plan.



Contents

4	Introduction
4	Objective
6	Feral Deer Impacts
8	Governance
9	Goals and Actions
12	Implementation
	Prioritisation
	Community Engagement and Communications
	Operational Considerations
	Feral Deer Surveillance
15	Resourcing
15	Relevant Links

Introduction

The South Australian Feral Deer Eradication Program 2022-32 aims to eradicate feral deer from South Australia in 10-years. In the first two years of the program, over 20,000 feral deer have been removed from the state through government coordinated control programs, mostly from rural and regional areas of South Australia.

The eradication of feral deer from peri-urban areas will provide one of the greatest challenges to the state's eradication program. Control of feral deer in densely populated peri-urban areas requires complex operational safety considerations. In these situations, intensive planning, community engagement, and specialised control methods are required. Compared to peri-urban deer populations on the eastern seaboard, populations around Adelaide are still relatively low. This presents an opportunity to suppress intolerable impacts and get on top of this management issue before costs and logistics prohibit eradication.

Peri-urban zones occur on urban fringes between built-up suburbs and rural landscapes. The Greater Adelaide Peri-Urban Zone is more than 200,000 hectares (as defined by Australian Bureau of Statistics), much of which is inhabited by feral deer (see map). Feral deer also impact other peri-urban areas in South Australia, including parts of the Adelaide Hills, Fleurieu Peninsula, Northern Adelaide Plains, the Riverland, and the Clare Valley.

Feral deer are declared for destruction under the *Landscape South Australia Act 2019*, which means that all private and public landowners are required to destroy all feral deer on their land. Despite this requirement, feral deer control by landholders in peri-urban areas is limited, partly due to difficulties associated with the use of firearms on small properties.

Feral deer populations can increase by up to 35 per cent each year. To prevent this population growth and associated impacts, urgent coordinated action is necessary.

Objective

This Plan aims to eradicate feral deer from the Greater Adelaide Peri-Urban Zone by 2032, by tailoring collaborative strategies across complex landscapes of diverse property sizes, communities and land uses.

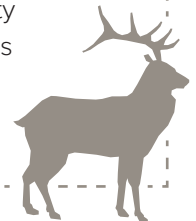
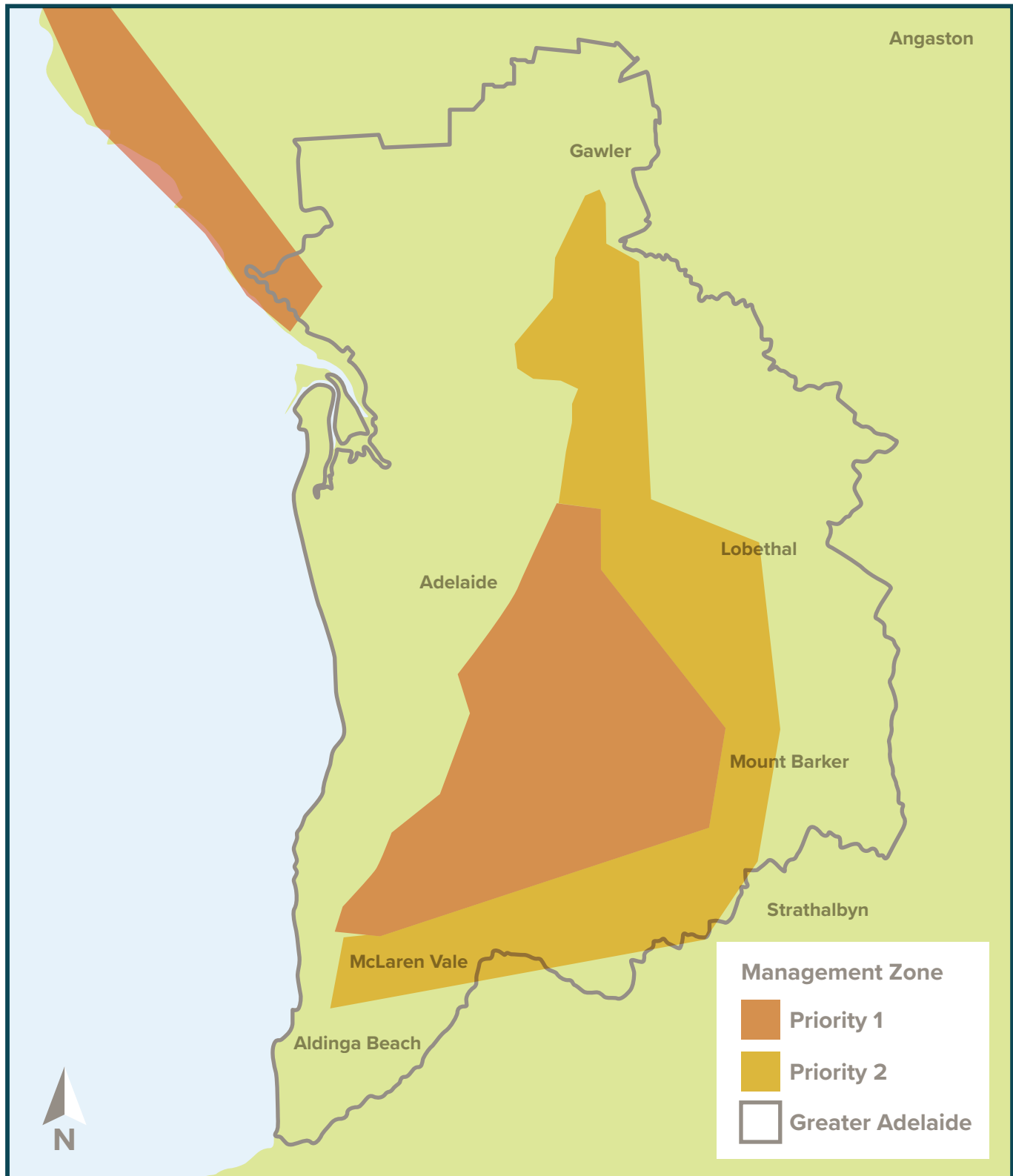


Photo: Fallow deer on the Limestone Coast. Steve Bourne



Greater Adelaide Peri-Urban Feral Deer Eradication Plan Priority Management Zones



Feral Deer Impacts

The impacts of feral deer in peri-urban areas are experienced across nearly all land use types and values. The four main impact categories include:



ENVIRONMENTAL

Feral deer negatively impact the environment through the grazing, browsing, trampling, and ringbarking of vegetation, thereby reducing habitat and biodiversity. They also damage watercourses, compete with wildlife for resources and pose direct and indirect risks to threatened flora and fauna. They quickly spread into recently burnt bushland and browse regrowth, hampering recovery of habitat.



AGRICULTURAL

Feral deer impact primary production through damage to pastures, crops, vineyards, orchards and forestry plantations. They also compete with livestock for pasture, damage farm infrastructure and pose a biosecurity risk. In 2022, feral deer cost the South Australian economy \$36 million in agricultural productivity losses. State-wide productivity losses were projected to increase to over \$241 million by 2032 without the eradication program (Feral Deer Control Economic Analysis, BDO EconSearch 2023).



PUBLIC SAFETY

Feral deer are an increasing traffic hazard on peri-urban roads. There have been several incidents where aggressive feral deer have attacked people and caused injuries, while illegal hunting activities that target feral deer threaten public safety.



PUBLIC AMENITY

Feral deer can cause significant damage to private and public gardens, and in some cases damage to houses, ovals, playgrounds and other infrastructure.

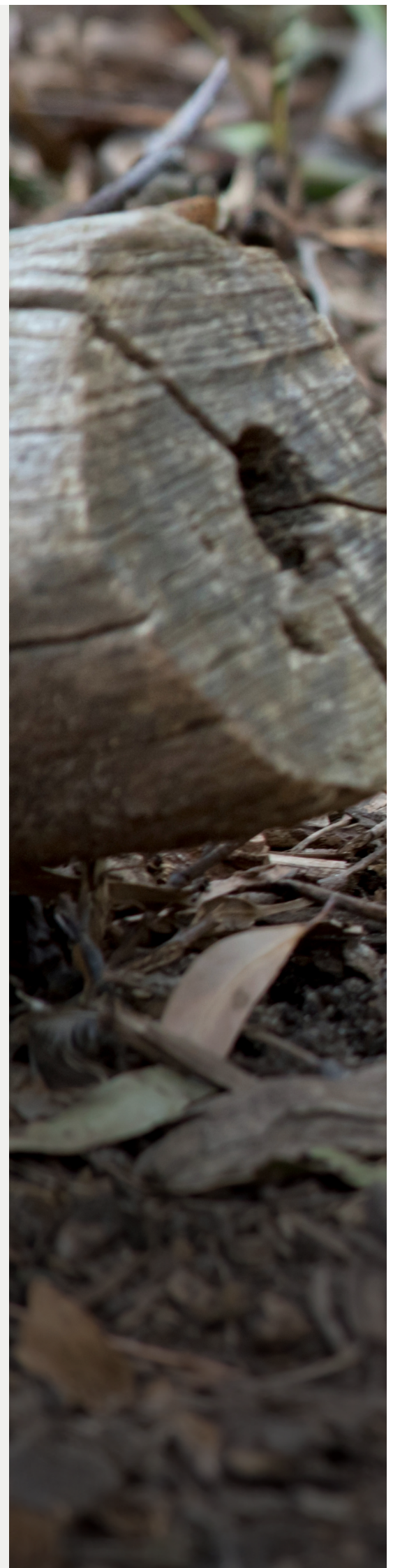




Photo: Southern brown bandicoot

Feral deer ecological impacts

The Mount Lofty Ranges is one of 15 biodiversity hotspots in Australia, and is home to many threatened species. Feral deer grazing is contributing to the destruction of habitat for threatened species such as the Endangered (EPBC Act) southern brown bandicoot, making them more vulnerable to predation by foxes and cats. This plan aims to address the threat of feral deer and maximise the success of habitat restoration programs that aim to preserve this species.

Governance

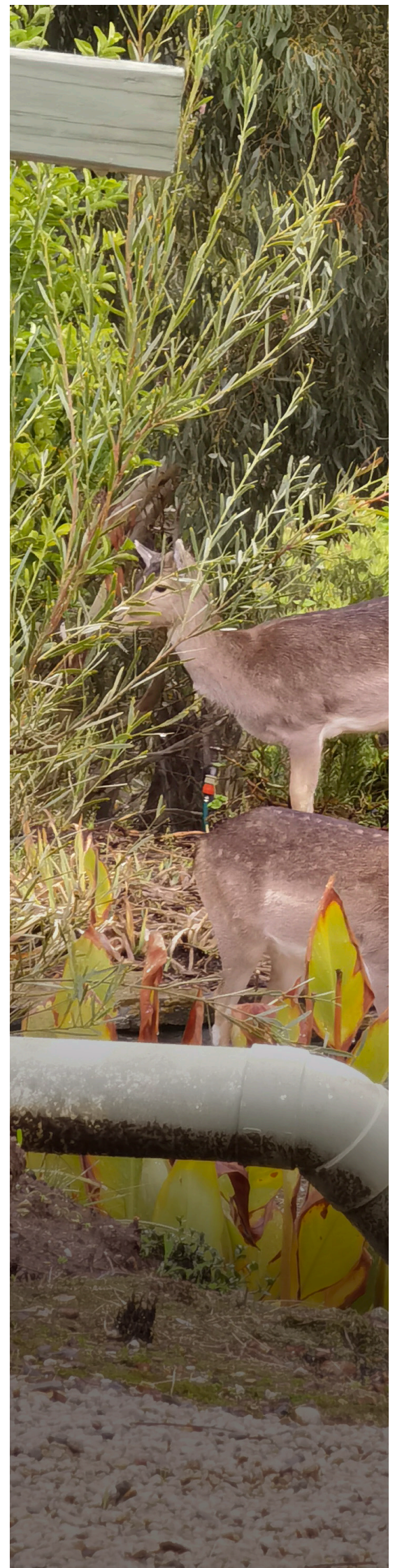
The *Greater Adelaide Peri-Urban Feral Deer Eradication Plan* (the Plan) is currently advised by the Peri-Urban Feral Deer Working Group, with representatives from public land management agencies, regional landscape boards and local councils.

The purpose of the Working Group is to:

1. Provide strategic direction for the program to eradicate feral deer from the Greater Adelaide Peri-Urban Zone, particularly in the Adelaide Hills region.
2. Maximise stakeholder understanding and engagement with the plan and encourage participation in the plan's implementation by stakeholders.
3. Monitor progress toward the goals of the Plan.

The South Australian Department of Primary Industries and Regions (PIRSA) provides cross-regional coordination of the Plan in alignment with the South Australian Feral Deer Eradication Program, and in accordance with the *Landscape South Australia Act 2019*.

Implementation of the Plan and associated compliance actions within each region is the responsibility of relevant landscape boards.





Goals and Actions

This Plan is aligned with goals and actions of the *National Feral Deer Action Plan 2023-28* and the *Strategic Plan for the South Australian Feral Deer Eradication Program 2022-32*. The goals and actions of this Plan are:

GOAL 1

Engaging stakeholders and building capacity.

ACTION 1

Develop and implement communication packages and strategies for increasing community awareness of feral deer impacts, tailored to the Greater Adelaide Peri-Urban Zone.

ACTION 2

Identify and develop organisation and community capacity for planning, coordinating, and implementing ground control, and training where needed.

ACTION 3

Seek permission from landholders for access to their land to implement coordinated cross-tenure surveillance and control of feral deer in priority areas.



GOAL 2

Eradicating feral deer from the peri-urban zone by 2032.

ACTION 4

Identify management zones for collaborative, coordinated control, to be implemented in order of priority based on risk, community support, stakeholder capacity, chance of success and complexity.

ACTION 5

Increase surveillance and intelligence gathering on where feral deer are, before and during operations (e.g. using cameras, drones and community reporting).

ACTION 6

Identify, plan and implement best practice ground and aerial control strategies (including new and emerging tools) to achieve eradication in each management zone.

Photo: Fallow doe. Tom Lord



GOAL 3

Prevent harbouring/illegal release of feral deer in the peri-urban zone.

ACTION 7

Where landholders refuse to participate in cross-tenure control programs or destroy feral deer on their land (as per legislation requirements), use compliance tools to ensure all feral deer can be eradicated.

ACTION 8

Regularly audit deer farm fences to ensure domestic deer are not likely to escape, and to require sub-standard fences to be fixed or upgraded promptly, where required by legislation.

Photo: Stella Scanlon

Implementation

Detailed implementation plans will be developed for each management zone by relevant regional landscape boards in conjunction with key stakeholders.

Implementation plans will consider:

- Identification and prioritisation of control units within the management zone.
- Community and landholder engagement.
- Effective control methods, safety plans and processes.
- Compliance approach.
- Internal resourcing requirements.

Management Zones

While deer are known to be present across much of the Greater Adelaide Peri-Urban Zone, their numbers and impacts are at their highest in the Priority 1 Management Zone, followed by the Priority 2 Management Zone (see map). As the Plan progresses, management zones may be divided or modified, and additional zones may be identified.

Prioritisation

Control efforts will initially be focused on more accessible and highly impacted management zones and control units (containing high densities of feral deer). As the Plan progresses, operations will expand into more operationally complex sites, and into areas of lower deer density where re-incursion is less likely.

Control activities may be prioritised based on:

- Presence/density of feral deer populations (e.g. from public reporting or other data sources).
- Proximity to large areas of accessible habitat, including large areas of public land (e.g. conservation parks and reserves).
- Level of support from private landholders or community groups. Support is generally greater in more impacted areas.
- Isolation of feral deer population. Controlling outlying populations can reduce population spread.
- Property size. Deer are more efficiently targeted on larger properties, or on clusters of smaller properties.
- Threat to high priority assets.
- Areas subject to recent burning (either prescribed burns or bushfire).

Community Engagement and Communications

The Plan will be supported by a dedicated communication and engagement package to assist all stakeholders in delivering strong and consistent messaging to their local community. Messaging will highlight the importance of early action in eradicating feral deer from the Greater Adelaide Peri-Urban Zone, as well as the importance of reporting sightings and control efforts via FeralScan.



Photo: Thermal image of deer. Tom Kloeden

Operational Considerations



Landholder engagement and notifications

Peri-urban areas include many small parcels of land. For control to be effective, large numbers of landholders need to provide access to their land for operations. To achieve this, landholders must understand why feral deer need to be removed and be assured that control operations adhere to high standards of safety, risk mitigation and animal welfare. Non-participating landholders nearby (i.e. from neighbouring residential areas) may also need to be notified of control activities to mitigate concerns.



Compliance

Where feral deer populations are being negligently or wilfully maintained or harboured by landholders (i.e. without sufficient control), landscape boards will strategically enforce the requirement for landholders to destroy feral deer on their land. Enforcement activities will prioritise properties where failure to meet the requirement would threaten the success of the Plan. Compliance includes a range of actions from education through to procedural enforcement.

Deer farm inspections will be undertaken at least once every two years by regional Landscape Boards to ensure compliance with the requirements to contain and tag deer. A process for identifying the locations of unregistered deer farms will also be undertaken.



Control tools

The range of control tools available for feral deer eradication, including their relative benefits, limitations, and humaneness are detailed in *The Strategic Plan for the South Australian Feral Deer Eradication Program 2022-32*, and their use is guided by the *National Code of Practice for the Effective and Humane Management of Feral and Wild Deer*.

The early stages of the Plan will primarily rely on ground shooting by professional shooters, using the most advanced detection equipment such as thermal imaging (including thermal scopes and drones). There are also locations where aerial shooting is appropriate and due to the effectiveness of this method, should be used wherever possible. Coordinated operations will also be supported by ongoing control efforts by landholders and volunteer shooters.

Emerging technologies and control tools (including lethal baits) will also be employed where appropriate, as they become available.



Carcass management

The carcasses of culled feral deer will be left to decompose (mostly within a few weeks), except where there is a risk to public amenity or health (in residential areas or facilities), in which case carcasses may be taken to a disposal site. Whole carcasses can be difficult, time-consuming or unsafe to retrieve, particularly when vehicle access is limited, and the resources are usually better invested on activities that contribute to further reducing feral deer populations.

Commercial harvest may be utilised where economically viable (e.g. in accessible areas with high densities of feral deer), however in most situations meat and antler retrieval from culled feral deer are impracticable and do not efficiently contribute to eradication goals. Landholders may choose to safely use carcasses on their land as they wish.

Feral Deer Surveillance

Community surveillance will be a critical component of the program, to help collect data on the changing distribution and abundance of feral deer in peri-urban areas. The community will be encouraged to report sightings of feral deer or control activities using FeralScan - a free pest reporting tool. Reports may also be made directly to the relevant landscape boards.

Other surveillance activities will support operational planning and monitoring. This may include aerial surveys (e.g. thermal drone), camera trapping and impact monitoring (e.g. vegetation impact assessments). Emerging detection techniques such as collection of environmental DNA (eDNA) in water samples may also be used.



Case Study – Adelaide Hills Feral Animal Control

Landscapes Hills and Fleurieu's Regional Grazing Pressure Management (RGPM) Program has been coordinating the control of feral deer and goats within the Adelaide Hills for a number of years.

Between April and October 2024, contract shooters engaged through the RGPM program have targeted peri-urban feral deer and goats in the Hills and Fleurieu and Green Adelaide Landscape regions. This early work has shown that many landowners experience intolerable impacts from feral deer, and are willing to have professional shooters destroy deer on their properties. Using specialised tools and techniques, over 350 deer have been removed from approximately 130 peri-urban properties in 2024.

This ground shooting program builds upon successful aerial shooting programs adjacent to peri-urban areas, including at Mt Bold Reservoir Reserve and Scott Creek Conservation Park, and in the Montacute area. This is the important and foundational work which will lead to additional opportunities for aerial shooting programs to support this Plan.

Photo: Thermal image of deer. James Reeves

Resourcing

Increased investment early in the eradication program (aiming for a 60% cull rate), in line with the targets set in the *Strategic Plan for the South Australian Feral Deer Eradication Program 2022-32*, will lead to an overall lower total cost (Figure 1), and progress towards eradication (Figure 2). Detailed budgets will be developed for each management zone.

All landholders will be encouraged to contribute resources to the program. Governments will also contribute to the program. Landscape levy funds will be a major component, and the priority for expenditure of these funds will include operations on private land where landholders do not have the capacity to safely undertake their own control. Industry co-contributions will be sought from impacted or potentially impacted industry groups. Public and corporate land managers will be expected to provide co-contributions to coordinated control activities or undertake their own control programs in accordance with their requirements under the Act.

Peri-urban deer control scenarios – Annual cost estimates

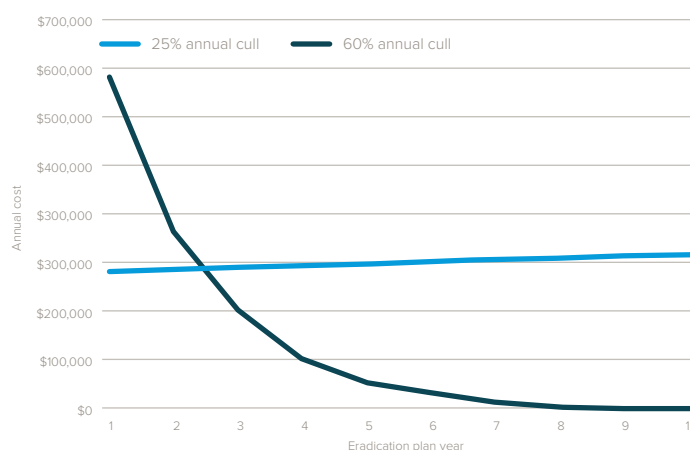


Figure 1: Annual estimated cost comparison of two peri-urban deer control scenarios (assuming 35% reproductive rate, and a fixed control cost of

Peri-urban deer control scenarios – Population model

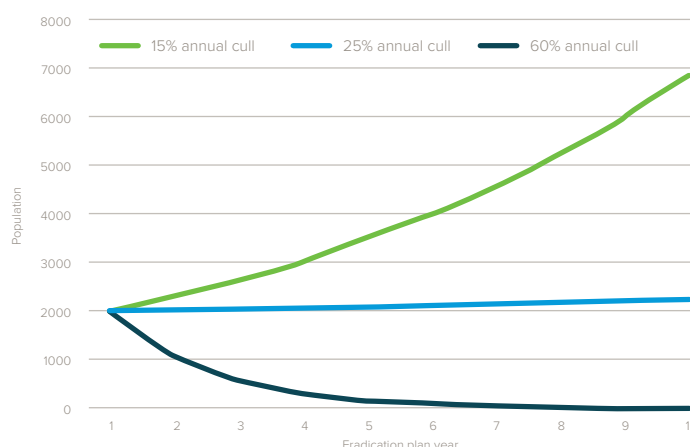


Figure 2: Population model for three peri-urban deer control scenarios (assuming 35% reproductive rate).

Relevant Links

Strategic Plan for the South Australian Feral Deer Eradication Program 2022-2032

https://pir.sa.gov.au/__data/assets/pdf_file/0004/440824/strategic-plan-sa-feral-deer-eradication-program.pdf

Feral Deer Action Plan

<https://feraldeerplan.org.au/the-plan/>

Landscapes Hills and Fleurieu Regional Pest Strategy

<https://cdn.environment.sa.gov.au/landscape/docs/hf/FINAL-Regional-pest-strategy-23042024.pdf>

Landscapes SA Act 2019

<https://www.legislation.sa.gov.au/lz?path=%2FC%2FA%2FLANDSCAPE%20SOUTH%20AUSTRALIA%20ACT%202019>

National Code of Practice for the Effective and Humane Management of Feral and Wild Deer

<https://pestsmart.org.au/toolkit-resource/effective-and-humane-management-of-feral-and-wild-deer/>

We acknowledge the lands of Kaurna and Peramangk First Nations on which this plan is based. We pay our respects to Elders past, present and emerging. We acknowledge and respect their deep spiritual connection to Country.

For further information on this plan contact:

Hills and Fleurieu Landscape Board
Email: hf.landscapeboard@sa.gov.au
Phone: 08 8391 7500

