



NEWSLETTER December 2022

Have your say

The Draft National Feral Deer Action Plan 2022-2027 has been released for consultation.

You can access it by visiting our website <u>here</u>.

Consultation is open until Monday 20th of March.





National Feral Deer Action Plan 2022–27

DRAFT FOR CONSULTATION

www.feraldeerplan.org.au









Australian Government Department of Agriculture, Fisheries and Forestry

Have Your Say



Australia's feral deer problem is increasing. Land managers in both rural and urban areas have seen feral deer go from being a novelty to being widespread in many parts of the country. Today, they are found across almost one-quarter of New South Wales and Tasmania, and nearing half of Victoria.

Feral deer impact our agricultural production, environmental and cultural assets, and pose risks to biosecurity and community safety.

The draft National Feral Deer Action Plan is focused on supporting farmers, communities, organisations, Traditional Owners, and government agencies to stop the spread and reduce impacts of feral deer.

The plan prioritises the need to contain large populations of feral deer and eradicate smaller, isolated populations, where feasible. The plan also prioritises the need for new control tools to augment shooting, trapping and fencing, and coordination across land tenures, including to protect significant sites. The Plan is being developed by a Working Group, supported by the National Deer Management Coordinator, who are working with stakeholders across Australia.

The National Feral Deer Action Plan Working Group wants to hear from you. Your feedback is important to us and will be considered in the preparation of the final plan.

Find out more by reading the draft plan, which can be downloaded <u>here</u>

- Send your feedback by email to coordinator@feraldeerplan.org.au, or via the <u>Contact Us</u> form on the Feral Deer Action Plan website, by Monday 20th March 2023.
- A public webinar on the draft plan will be held on Monday 23 January 2023 at 2pm AEDT, details to be provided on www.feraldeerplan.org.au

Consultation closes on Monday 20th March 2023.

Vision

Actively stop the spread, suppress, or eradicate, Australian feral deer populations to reduce their impacts on agricultural, environmental, cultural and social assets

Goal 1

Stop the spread of large populations and reduce their impact

- Create a national feral deer containment zone
- Control priority feral deer populations in the current distribution range

Goal 2

Control or eradicate small populations before they spread

- Eradicate small populations beyond the containment zone
- Reduce the impacts of feral deer in peri-urban areas

Goal 3

Protect significant sites from impacts

- Develop management plans to protect national significant areas
- Protect habitats recovering from bushfires



How we will do it



1. Neighbours/communities working collaboratively together

Because feral deer move readily across many property boundaries, they need to be managed at landscape scales. Landscape scale control of feral deer requires a coordinated, best practise approach, which seeks participation from all land managers, irrespective of land use. The Plan will promote local and regional coordinators to support groups to pool efforts, share knowledge and responsibility for feral deer control.



2. Increase awareness

The Plan will build awareness of feral deer distribution, spread and impacts, and the need to act early, through workshops, forums, networks and media. It will also seek to fill data gaps in feral deer distribution and impacts.



3. Promote best practice to reduce impacts in large feral deer populations

The Plan will update and promote best practice guides, tools and approaches and highlight demonstration sites that employ strategic use of tools across landscape scales. The Plan will also promote the need to remove at least 35 to 50 per cent of a local feral deer population (particularly females) each year to counter natural population growth, and reduce impacts.



4. Prevent the spread

Preventing the spread of existing feral deer distributions (particularly into periurban areas) and eradicating isolated incursions is the most feasible approach to managing the national feral deer problem, at least until more cost-effective tools are available. The Plan will promote proactive surveillance and early response plans and strategic programs to tackle feral deer as soon as they pop up in new areas. It will also promote investment to eradicate small isolated incursions, to prevent future explosions in deer populations.



5. Protect areas of national significance from impacts of feral deer

The Plan will identify nationally or internationally important sites (e.g. RAMSAR, World Heritage, indigenous protected areas) that are threatened by or impacted by feral deer and promote the need for site management plans that proactively protect the environmental and cultural values from future impacts of deer.



6. R&D to improve control tools

Land managers and programs are often not able to shoot or trap feral deer at sufficient intensities to meet their management goals. Low-effort control tools such as baits, or automated detection technology would enable these programs to increase efficiency and effectiveness. Thermal technology is also advancing quickly, and is likely to play an increasingly important role in surveillance and control of feral deer in Australia. Research on new tools, as well as strategies to improve existing tools will increase our chances of managing feral deer impacts.



A new study from Natural Resources and Environment, Tasmania, found a strong association with fallow deer activity post bushfire.

The study deployed 70 camera traps in forest and highland vegetation within the Central Plateau. "The Central Plateau was targeted because (i) it is the primary region through which fallow deer are likely to spread into the Tasmanian Wilderness World Heritage Area (TWWA); (ii) the area has experienced two recent bushfires (2016 and 2019) and therefore allowed for assessment of the impact of bushfires; and (iii) climate projections show that this region is already experiencing and will continue to experience amongst the most significant effects of climate change within Tasmania over the 21st century (Grose et al., 2010)."

The effects of the bushfires on deer activity were investigated by comparing camera stations burnt by these bushfires with a similar number of stations in similar habitat that have not been burnt since at least 1961. Bushfire effects on deer were assessed 1.5 years and 4.5 years after fire.

Camera traps were deployed in August 2020 and were retrieved three months later.



Findings

Fallow deer were detected on cameras only as far west as the Lake Augusta areas on the Central Plateau, although deer signs have been reported further west including in the Walls of Jerusalem.

Activity of fallow deer increased 19-fold in the Lake Augusta area from 2019 to 2021, with most activity occurring in areas burnt in the 2019 bushfires (see Figure to the right).

At Lake Augusta, where monitoring has occurred annually for three years in highland vegetation following the 2019 bushfire, activity of fallow deer activity increased significantly 2.5 years after fire. This finding is consistent with studies on herbivore activity after bushfire.

The authors note that "A limitation of the study is that the activity of deer in recently burnt and unburnt camera stations prior to the bushfires is not known and there were not experimental replicates for each bushfire. Therefore, any differences detected could be due to factors other than fires."

Conclusions

The low number of deer detections at Lake Augusta and lack of detections in the Walls of Jerusalem where they have been previously recorded suggests that the deer density is low at present.

Of concern is the large increase in deer activity in areas burnt by the 2019 bushfire, which may facilitate spread intro the TWWHA and their deleterious impact on vegetation and ecosystem recovery after bushfire.

Read the whole article: <u>Monitoring Priority</u> <u>Wildlife in the Tasmanian Wilderness World</u> <u>Heritage Area</u>



The deer control program is run by Sunshine Coast Council. The council area is just shy of 23000 square kilometres and has an estimated population of 400,000 people. The land area is a mix of large agricultural area and high urban areas and there are two main species – Red and Rusa deer. There is also one population of fallow.

Some tips from the program staff:

Tip number 1: "Not acting is still acting because you choose to do nothing. Ask yourself – what's going to happen if you don't do anything?"

Tip number 2: "Focus on getting access to a few key properties. You don't need to work on every property in your region to make a difference."

Tip number 3: "Keep your community involved. You need the community on your side, so you have the social licence to operate."

1. Property survey

Before undertaking any control, each property undergoes a risk assessment.

If the neighbours are not part of the program, they are asked for permission to access their properties for humane destruction i.e., if an injured deer goes on their property.

2.Equipment

Use of suppressors for controlling feral deer is restricted in QLD. The restriction of access to suppressors has been a challenge to this program.

In the past, timelapse cameras have been used. Timelapse cameras detect deer from around 200m away, compared with 16m for standard trail cameras. A thermal drone with a high-quality sensor helps find deer carcasses in the paddock. The team found that they were previously spending 2/3 of their time trying to find carcasses in long grass.

The rifles used are .300blackout calibre. Control is supported with thermal scopes, and thermal binoculars.

3. Notifying the community

All landowners and neighbours within 300m are notified at least 36 hours before control commences on the property.

4. Control

All control is by open range ground shooting. With the blackouts, supersonic rounds are limited to about 200m and subsonic to about 100m.

Sunshine Coast Council has two dedicated deer officers with the expertise and accreditations to undertake safe and effective shooting. Each of the deer controllers has their firearms license, and as part of council undertakes humane destruction and firearms training. Every 8 weeks, the controllers undertake a firearms safety course to test proficiency and accuracy

Most control work is done on private land, but they also operate within Council environmental estate.

Tip number 4:

"If you don't have the existing staff to undertake control operations, consider upskilling existing staff or bringing in bring skilled staff".





5. Carcass management

Staff encourage landowners to use carcasses as much as they can. Carcasses that aren't used or disposed of by landowners are taken to the tip by program staff

The program is seeking agreements with a couple of large zoos in the region to donate carcasses. This is important for improving community perception of the program.

6.Deer monitoring

Monitoring is done using time lapse cameras and thermal transects. Thermal transects are done three times a year to track deer activity levels.

7.Community Engagement

The program does 14 public displays a year including the Mulaney Show, the Moloney Wood Expo, Garden Expos and Community Hall events.

8.Community reporting of deer sightings

The program receives some reports of deer on Feral Scan (deer scan). Most community reporting is directly to the council (e.g., landowners phoning or land for wildlife officers contributing information), or through one-onone interactions at the coffee shop, or at stalls.

IMPACT OF THE PROGRAM

Deer density population in August 2015 was 10.4 deer per square kilometre. Now it is reduced to about 2.7 deer per square kilometre.





RESEARCH -How do you deter feral deer?

How do you deter feral deer?

Audio from ABC broadcaster Richard Fidler's long-running radio program "Conversations" has been used in a study to detect whether human voices are an effective tool in deterring feral deer. This was University of Tasmania honours project by Lucy Turnball.

Lucy monitored feral deer on a sheep farm in Tasmania's northern midlands. Monitoring cameras triggered by motion would begin to video and an associated sound box would play Conversations.

So far, the technique has been proving effective. There was a 50% reduction in feral deer where the sound box was activated with human voice. Comparatively, the sound of other animals such as sheep did not have the same effect.

After three months, some of the sound boxes were removed to monitor whether deer numbers recovered. In the month and a half of monitoring since sound boxes were removed, numbers have remained low.

The hope is that the sound of human voices can help landowners to protect places of value. Lucy said, "This particular type of technique, using sound as a deterrent, is potentially best used alongside hunting, which would be reinforcing that background fear of humans", she said.

This technique alone won't protect land from feral deer, but it could be another tool in our toolbelts.

Read more <u>here</u>



Other repellents

There are a series of deer repellents that have been made through the ages - ranging from homemade remedies to expensive solar panel repellers.

Some deer repellents are made from putrified eggs, dried blood, garlic, or soaps and some believe that repellents are most effective when made of egg-based products. Others say that dogs are the best repellent. Others again endorse flashing red lights or ultrasonic sounds.

In reality, it is suggested to use whatever works best for you but to keep many tools in your toolbelt. Deer will adapt to repellents over time and learn to ignore them. In many parts of Australia, deer numbers are still increasing. Keeping numbers down in the area will continue to be important.

To read more about repellents you can visit the following sites:

<u>5 Best Deer Repellents (2022 Review) - This Old</u> <u>House</u>

<u>3 DIY Deer Repellents to Protect Your Garden</u> <u>from Hungry Guests (bhg.com)</u>

<u>The Best Deer Repellents of 2022 - Picks from</u> <u>Bob Vila</u>



MORE INFORMATION

What do dinosaurs and deer have in common?

Stag to stag combat is helping us understand how ankylosaurs behaved.

Life as a dinosaur was full of aggression. To ward off supersized angry predators, many herbivorous dinosaurs were biologically armed to the extreme. Skulls with studded horns, tails with spikes, even spikes that act as spears on the side body.

The ankylosaur is no exception. Alongside this dinosaur's amour of jagged bone plates, it sports a tail that could be mistaken as a sledgehammer. The tail is used to deliver bone-cracking blows which we assumed for decades functioned as a defensive behaviour against larger apex predators.

However, a <u>recent study</u> analysing ankylosaur skeletons found several specimens with suspiciously healed armour plates. The type of damage and the location strongly indicate that the perpetrator was another ankylosaur.

Ankylosaurs left no living descendants, so we have no living analogues to learn about the ancient dinosaur's behaviour. To help us understand what happened in the past, we look to animals currently living in our world.

One such example is deer. Deer fight each other with evolved weapons, to secure a mate and a status. In doing this, they commonly cause injuries to each other. It is possible that ankylosaurs similarly fought with each other in ritualistic combat.

The research is not saying that deer and dinosaurs are synonymous, but it is interesting that a similar behaviour may have evolved despite the 76 million years between them.

Contact us at coordinator@feraldeerplan.org.au



News about the plan:

<u>Have your say on the draft National Feral Deer</u> <u>Action Plan - PIRSA</u>

National plan to rein in deer a potential game changer - Invasive Species Council

National Feral Deer Action Plan draft released | The Land | NSW

Other news

<u>Why will deer be shot from helicopters in a</u> <u>Tasmanian national park? Here is what you need to</u> <u>know - ABC News</u>

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