

31 October 2023

Dear Natural Resources Commission,

RE: Submission to NRC's NSW Invasive Species Management Review

Introduction

I am the independent Chair of the National Feral Deer Action Plan Steering Committee. The Committee members from across Australia have provided an overview of the feral deer situation across Australia in building the National Feral Deer Action Plan. The national population of feral deer is concentrated in the eastern Australian states and has risen from two hundred thousand to around one to two million in the last twenty years. Feral deer in NSW increased their density and distribution by over 35% between 2016 and 2020 (NSW Department of Primary Industries survey data). NSW has the most widespread and dense populations of feral deer in Australia.

I write in support of strengthening NSW's policy and strategy approaches to reduce impacts of feral deer and other invasive species on agricultural, environmental, and social values. At a National Feral Deer Conference in Canberra in August 2023, seventy-five participants involved in invasive species management from across Australia (including the Australian Chief Environmental Biosecurity Officer, and Australia's Threatened Species Commissioner) heard reports of great challenges and efforts to tackle established feral deer populations, with some programs aerially culling many thousands of feral deer (in densities of up to forty deer /km²). Conference attendees from all states with widespread feral deer populations encouraged regional delegates from areas with low densities of feral deer to:

- Act early and eradicate isolated and low-density populations,
- Contain existing population from spreading, and
- Reduce the level of impact in areas where populations were large.

Summary Points for the NRC Review

A key issue for invasive species control is in achieving behaviour change in both public and private land managers to achieve 'whole of landscape' or 'cross tenure' participatory action. This needs much more regulatory, education, and extension policy support.

The National Feral Deer Action Plan identifies the following priority strategies, and these are applicable in principle, for invasive species generally;

- Prioritise populations for strategic control programs based on the following attributes:
 - Agricultural, environmental, and cultural/social value of the area.
 - Feasibility of meeting annual control targets (ongoing) that exceed natural population growth.
 - Ability to reduce impacts and maintain a low level of impact over time.
 - Strong support and participation from communities for cross tenure control.
 - Sub-populations where priority assets are threatened, or rapid spread is likely.

- Presence of new populations next to towns or cities, and small, isolated populations in other areas (including islands).
- Incursions of a new species into an area.

Background

Our National Feral Deer Action Plan Working Group (predecessor to the Steering Committee) recently developed the National Feral Deer Action Plan (www.feraldeerplan.org.au/the-plan), with funding from the Australian Government. The Plan highlights the geographic suitability and strategic benefits of eradicating or heavily suppressing and containing feral deer from some areas where populations are relatively small, including parts of central and western NSW. It also highlights the need to carefully prioritise areas for effective, and on-going asset protection where there are high numbers of feral deer. The Plan attracted strong support from more than 1600 submissions during consultation. The Plan was jointly launched on 14 August 2023, by the Federal Minister for the Environment and Water, and the Federal Minister for Agriculture, Fisheries and Forestry.

A feral deer national coordination program associated with the Plan has been successfully raising awareness, trialling new control tools, promoting best practice eradication and control efforts, supporting land management agencies and motivating community groups to run their own coordinated feral deer programs, to reduce impacts of feral deer on primary producers, environment and road safety.

In areas where feral deer numbers are high, this Plan urges states and territories to prioritise feral deer populations for strategic control programs based on the following attributes:

- The agricultural, environmental, and cultural value of the area.
- Feasibility of meeting annual culling targets (ongoing) that exceed natural population growth (generally 35-50% of the population each year, depending on the deer species).
- Ability to reduce impacts and maintain a low level of impact over time (some deer species may have higher impacts on valued assets than others, e.g., sambar deer have high impacts on alpine bogs).
- Strong support and participation from communities for cross tenure control across the distribution of the feral deer population.
- Sub-populations where priority assets are threatened, or rapid spread of feral deer is likely.
- Presence of new feral deer populations next to towns or cities, and small, isolated populations in other areas (including islands).
- Incursions of a new deer species into an area.

The Plan also encourages states to adopt best practice principles and strategies for feral deer management, particularly by:

- Coordinating control programs to increase the effectiveness, efficiency and sustainability of control efforts by all land managers in an area and reduce the areas where feral deer can seek refuge. Recent programs are finding that access for control is required across >80% of the land (cross-tenure) in a program area to ensure reduction targets can be reached and sustained.
- Using aerial culling as the primary tool for controlling large populations. Aerial control can be improved by repeat culls (preferably two per year) to drive densities to low levels, followed by secondary tools, such as coordinated, intensive ground culling across most of the area.

- Eradicating isolated populations of fewer than 1000 animals, that are separated from other feral deer by natural barriers or distance.
- Promoting the coordination of large-scale feral deer control programs as soon as possible following major bushfires (commencing within 18 months) when feral deer are more visible (particularly from the air), and when habitats are most vulnerable to browsing by deer.
- Implementing community awareness programs for peri-urban, agricultural and conservation audiences, to build social licence for feral deer control programs.
- Enacting a local surveillance plan to detect new feral deer incursions or increasing densities.
- Supporting the development and registration of one or more baits for feral deer through the Australian Pesticides and Veterinary Medicines Authority (APVMA), to augment other control tools for feral deer, where jurisdictions and land managers wish to do so.
- Sharing operational, effectiveness and welfare outcomes of thermally assisted control programs (particularly thermal-assisted aerial control, TAAC) to maximise developments in this technology, and to support training of operators, and for operators to consider investing in this equipment and capability.
- Preventing new feral deer populations— particularly in peri-urban areas where control is very expensive once feral deer are established. Prevention requires surveillance and rapid response plans. Local response plans should be widely promoted to the community, put into practice and reviewed regularly. They should include monitoring strategies, pre-emptive land access agreements, biosecurity protocols, standard operating procedures, carcass management, and agreements with skilled shooters (paid or unpaid pest controllers) who can quickly attend to sightings.
- Effectively confining farmed deer to reduce the risk of escapes, as they could form new feral populations. Where deer escapes are occurring, then regulations or compliance processes may need to be reviewed. Strategies such as fence standards, audits, mandatory ear tags and inclusion of deer in the National Livestock Identification System (NLIS, to track livestock movements, pending support from industry) are options to alert authorities to locations of farmed deer, ensure confinement, and identify or reduce escapes.
- Strengthening compliance measures to minimise escapes from local deer farms.
- Preventing farmed sika deer (*Cervus nippon*) from escaping, as there are no established feral sika populations in Australia.
- Considering strong disincentives, such as use of legislative penalties, for the deliberate release of deer (feral or farmed) for the purposes of establishing hunting populations, particularly where feral deer have been recently eradicated after considerable effort and cost.

Concluding Comment

One of the most challenging aspects that feral deer program managers report is a difficulty in gaining access to enough adjoining land to make landscape scale control program effective or encouraging enough land managers to do their own control (as per their Biosecurity Duty). Often this requires permission or participation from many land managers with different values about feral deer or ideas on how to manage them. To overcome this challenge, I encourage mechanisms that build capacity in the skills of program staff to effect land manager behaviour, to encourage them to control deer, and to achieve the land access required to make control investments effective.

Whilst public funds can help achieve a knockdown of invasive species populations the longer-term sustainable management of invasive pest animals relies on land managers maintaining control to keep populations at low impact levels. The behaviour change in land managers required to achieve ongoing pest animal control across landscapes is significant and will need legislative change to the NSW Biosecurity Act as well as

investments in participatory planning and collaborative operational skills both in the community of land managers and government support agencies.

I hope these aspects and principles of the Plan provide guidance for your review.

Yours sincerely,

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Telephone: 