2024-25 Tasmanian State Budget Submission

Submission by the Invasive Species Council

November 2023

About the Invasive Species Council

The Invasive Species Council is an independent donor-funded organisation that safeguards the Australian environment from invasive pests, weeds and diseases.

Formed in 2002, we have been at the forefront of efforts to strengthen biosecurity in Australia to better safeguard our land and seas from invasive species. We strive for a future in which invasive species are no longer a major cause of environmental decline and extinctions.

Inquiries

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Executive Summary

The feral deer population in Tasmania is now likely over 100,000 and continues to grow at 11.5% per year. Feral deer are estimated to cost the community up to $100 million annually, impacting agriculture, forestry, restoration, and road safety, with potential impacts for future green carbon markets and tourism.

Current efforts, including the $400,000 per year allocation in the 2021-2022 budget and the additional federal funding, are inadequate to address the scale of the problem. The Invasive Species Council estimates that at least $2.19 million per annum is needed for the next four years to effectively manage deer populations, a cost that represents only 2% of the annual economic impact of feral deer.

The $2.19 million per annum should be prioritised to:

- Eradication programs on King Island, Bruny Island, Tasman Pennisusla, NW Tasmania, East Coast National Parks (Freycient, Douglas Aplsry, Ben Lomand), peri-urbans areas of Launceston and Hobart.
    - Eradication programs should include per- and post-control population estimates at a localised scale using aerial, camera trap, and/or spotlight methodologies
    - Programs should include a range of management strategies, including aerial and ground shooting and trapping.
- Continued protection of Tasmanian Wilderness World Heritage Area
    - Continuation of the aerial cull program until deer are eradicated
    - Sophisticated monitoring program to prevent reinvasion
- Reduction of feral deer numbers in the Midlands
    - Support of ongoing property-based management plans
    - Increase culling efforts in the region
    - Program to include aerial culling where appropriate
- Appointment of six regional deer coordinators
    - Suggested regions: Northwest (inc. King Island), North (Launceston to Meander), Central Plateau, Midlands, East Coast, South (Bruny, Tasman, Hobart)
- Education and community awareness program
- Education and compliance program for deer farm regulations

Budget recommendations

Increase funding for deer control activities to $8.76 million for the next four years to support direct control of feral deer.

Detailed proposed budget

Item	Cost per annum
Administration	
Operating costs including support to property based management plans	**140,000**
Shooter accreditation program	**30,000**
Asset protection support	**250,000**
Education and community awareness programs	**100,000**
Education and compliance program for deer farm regulations	**100,000**
Appointment of local deer coordinators	**200,000**
Direct Control	
Recreational hunting and property protection permits	**100,000**
Pre- and post- control population estimates at localised scale (including aerial/camera trap/spotlight surveys)	**200,000**
Professional ground shooting (~30 deer/day)	**290,000**
Aerial shooting (~300 deer/day)	**480,000**
Peri-urban deer management	**300,000**
Total cost per year	**2,190,000**

Budget impact

Appropriations (,000's)

2022/23	2023/24	2024/25	2025/26
2,190	2,190	2,190	2,190

Priorities for funding

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Funding Benefits

Investing $2.19 million per annum over the next four years is estimated to save at least $400 million, but likely much more, over the next 4 years through saved deer-related costs to:

- Tasmanian agriculture and forestry, which are estimated to be between $12 and 90 million a year.
- The public in terms of vehicular damage and medical costs due to vehicle accidents with deer.
- Tourism through reduced visitation and use of national parks and wilderness area, impact to the food and drink industry, and concerns about road safety, which could potentially cost the economy millions per year in the future.
- Missed economic opportunities in the carbon market.
- Reduce the costs of future deer management.

Background

Feral deer in Tasmania have been increasing in numbers and distribution at an alarming rate, with the current population likely exceeding 100,000 and covering 27% of the State [3]. This ever-expanding population now threatens Tasmania's unique and outstanding natural and cultural values along with highly valued agriculture and forestry. Based on the estimated 11.5% annual growth rate, deer numbers will exceed 1 million and inhabit half the state within 30 years without significant intervention [3].

Deer have expanded beyond their 'traditional' range in the Midlands, including into the Tasmanian Wilderness World Heritage Area. There are several other satellite deer populations that have established outside the 'traditional' deer range as a result of deer farm escapes and intentional releases [3]. These include populations on the Tasman Peninsula, Bruny Island, Freycinet National Park, near Temma, and south of Hobart. Despite some efforts, no satellite herds have been eradicated and there are limited active local eradication programs presently occurring.

Current estimate of the distribution of Feral Deer

Potential occupation of fallow deer in Tasmania based on suitable climate and habitat [1]

The costs of feral deer

Feral deer are a serious environmental and agricultural pest as well as a threat to community safety and cultural heritage. The annual cost to the community from the impacts of feral deer in Tasmania could already be as high as $100 million [8]. Feral deer have negative impacts on some of Tasmania's main sources of income: agriculture, forestry, and tourism.

Feral deer are costing the agricultural sector an estimated $10-80 million per year in terms of crop and infrastructure damage [4]. The cost to agriculture will be much higher should livestock diseases such as foot and mouth disease reach Tasmania, as disease spread will be near impossible to control

with the high density population of feral deer throughout Tasmania's primary agricultural regions. Feral deer are also dramatically increasing the costs of restoration in the Midlands and will undermine the ability of Tasmania to attract investment in carbon offset schemes [2]. Plantings in the midlands cost as much as five times more in regions with feral deer versus without [2]. This means Tasmania will likely miss out on opportunities associated with the green carbon economy, which is expected to 'boom' over the next decade, including substantial offset funding and jobs.

Deer are also damaging to Tasmania's brand and reputation and threaten our future as a premier tourist destination. Tourism contributes over $2 billion to the Tasmanian economy [1]. Tasmania's brand identity as a pristine land and sea environment and rich cultural heritage is continually cited as a reason for visiting Tasmania [6]. Feral deer are established in several national parks and wilderness areas, degrading natural ecosystems and detracting from this pristine wilderness image. In other states, it has been estimated that the use of national and state parks for recreation will dampen by 1% due to degradation from the growing feral deer populations [7].

There are further costs to the economy resulting from deer-related vehicle crashes. Between 2013 and 2021, 68 deer-vehicle collisions were recorded, with more being recorded elsewhere or unrecorded [5]. In the recent economic analysis of the impacts of feral deer in Victoria, the highest cost to the economy over the next 30 years was that associated with deer-related vehicle accidents [7]. Tasmania will also see increasing costs in the future without significant control of deer near major roads, such as the West Tamar Highway.

Without substantial intervention, the feral deer population is expected to reach 1 million by 2050 and with it, the costs to the Tasmanian economy and community. The economic costs associated with a population of a million feral deer in Tasmania could easily reach into the billions, as has been estimated for Victoria [7].

The reported economic benefits of hunting are paltry by comparison. The recently released report produced for the Tasmanian government into the Economic Contribution of Recreational Hunting and Shooting to the Tasmanian Economy found deer hunting contributed a total of $29.3 million per year to Tasmania's Gross State Product (GSP), which is 0.00079% of Tasmanian's total GSP for 2021-22 of $36.7 billion.

The study's findings were based on a voluntary survey of shooters, who self nominated their expenditure during the past 12 months. No receipts or proof was required. The study also found that 'if hunting… were to (hypothetically) cease, the economic activity currently contributed by hunting… would not cease; although it may change as hunters… turn to alternative ways to recreate or spend/save their money'

More resourcing is required

The 2021-2022 Budget allocated $2 million across the next 4 years to the implementation of the Fallow Deer Management Plan. According to the Implementation Strategy, this funding has and will support an aerial culling trial in the Walls of Jerusalem, deer control activities on King Island and around Launceston, employment of an additional officer dedicated to working with farmers and hunters to increase the take-up of property-based game management plans, and support for existing deer farmers to market and showcase their product. To see the reduction of the harmful impacts of feral deer on the Tasmanian economy will require further control programs across Tasmania that are sufficiently funded.

In 2022, the federal government provided $850,000 to support feral deer control, including $400,000 to supplement the aerial deer control pilot in the Walls of Jerusalem National Park and $450,000 to control deer near major arterial roads near Launceston.

For the Fallow Deer Management Plan to succeed in its outlined objectives will require more than the allocated $2 million over the next four years. The level of resourcing required to achieve the first objective in the Implementation Strategy alone will exceed the allocated approximate $450,000 per annum, let alone the rest of the activities outlined in the Strategy. The one-off federal government funding will only provide temporary relief.

It is extremely important that control activities are initiated as soon as possible and are sufficiently supported until complete. The costs of control increase dramatically the longer populations are allowed to establish [Figure 1].

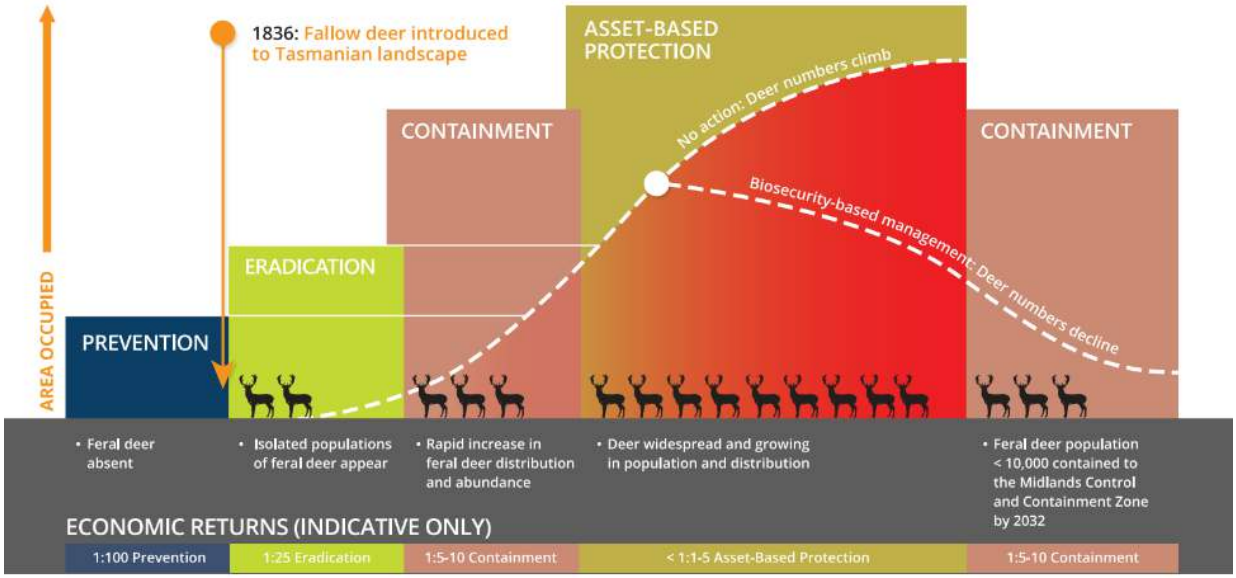

Figure 1: Generalised Invasion Curve. Source (based on DPI 2010)

The Invasive Species Council estimate that eradicating satellite populations of deer in Zone 3 and reducing the population of deer in Zone 1 and 2 to densities likely to minimize their negative impacts will cost at least $2.19 million per annum for at least the next four years, or $8.76 million over the next four years.

This $2.19 million annual cost is only 2% of the estimated $100 million annual cost of feral deer to the community and economy. Investing now in effective control is extremely prudent – it will save many more millions of dollars that will be needed if feral deer numbers are allowed to continue to grow, plus save the millions of dollars such high numbers of feral deer will cost the Tasmanian community.

It should be noted that investment into effective deer management now will not undermine the economic benefits derived from hunting. Removing satellite populations of deer and reducing the population of deer in the Midlands regions will still allow for ample hunting opportunities and the economic revenue derived from these activities while also relieving the growing economic costs of

feral deer for the rest of the Tasmanian community.

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1. Australian Trade and Investment Commission (2020) State Tourism Satellite Account 2019–20 Report.
2. Burgess, S. (2016) Inquiry into the wild fallow deer population in Tasmania. Submission to the Legislative Council.
3. Cunningham, C. X., Perry, G. L., Bowman, D. M., Forsyth, D. M., Driessen, M. M., Appleby, M., Johnson, C. N. (2022). Dynamics and predicted distribution of an irrupting 'sleeper' population: fallow deer in Tasmania. Biological Invasions, 24(4), 1131-1147.
4. Donaghy K (2020) Transcript of evidence by Ms Kylie Donaghy, Tasmanian Farmers and Graziers Association, to the Senate Inquiry into the Impact of feral deer, pigs and goats in Australia, 14 October 2020.
5. DSG (2021). Crash data statistics. Department of State Growth. Tasmanian Government.
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7. Frontier Economics (2022) Counting the doe: an analysis of the economic, social & environmental cost of feral deer in Victoria
8. Invasive Species Council (2021). Feral Deer Control: A Strategy for Tasmania.
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10. Tasmanian Deer Advisory Committee Inc (2018) Submission to the senate inquiry into the impact of feral deer, pigs and goats in Australia by the Environment and Communications References Committee.