



2 November 2018

Committee Secretary
Senate Standing Committees on Environment and Communications
PO Box 6100
Parliament House
Canberra ACT 2600

To Whom it May Concern

Inquiry into the Impacts of Feral Deer, Pigs and Goats in Australia

Thank you for the opportunity to provide comment to the inquiry into the impacts of feral deer, pigs and goats in Australia.

Effective management of invasive plants and animals to reduce their impacts on the community, environment and industry is an important issue for Queensland local governments. Collectively, local governments expend \$45 million on an annual basis to reduce the impact of invasive plant and animal species, including feral deer, pig and goats.

The LGAQ requests the Environment and, Communications References Committee consider the following key concerns to Queensland local governments:

- The need to harmonise definitions and management expectations of feral deer, pigs and goats across jurisdictions to assist in coordinated control approaches
- A comprehensive survey of the presence of feral deer, pigs and goats to understand the risks posed by their potential spread
- The development of new control methodologies for feral deer, particularly in urban and peri-urban areas
- The development of national best practice management guidelines for the control of feral deer
- The establishment of collaboratively developed national threat abatement plans that are fully implemented and appropriately resourced.

Please don't hesitate to contact Ms Kristy Gooding, Lead – Natural Assets and NRM on
or should you wish to discuss any aspect of these
comments.

Yours sincerely

Sarah Buckler PSM
GENERAL MANAGER - ADVOCACY



Inquiry into the Impacts of Feral Deer, Pigs and Goats in Australia

Submission

Local Government Association of Queensland Ltd

2 November 2018



The Local Government Association of Queensland (LGAQ) is the peak body for local government in Queensland. It is a not-for-profit association setup solely to serve councils and their individual needs. The LGAQ has been advising, supporting and representing local councils since 1896, allowing them to improve their operations and strengthen relationships with their communities. The LGAQ does this by connecting councils to people and places that count; supporting their drive to innovate and improve service delivery through smart services and sustainable solutions; and delivering them the means to achieve community, professional and political excellence.

1.0 Introduction

The Local Government Association of Queensland (LGAQ) welcomes the opportunity to provide comment to the inquiry into the impacts of feral deer, pigs and goats in Australia.

Local governments in Queensland view biosecurity matters and invasive plants and animals as one of the most significant threats to productivity, human wellbeing and the environment and play an important role in managing biosecurity on council owned land as well as undertaking compliance and enforcement activities within each local government area. Collectively, Queensland local governments spend approximately \$45 million of limited resources per annum to reduce the impacts of invasive plant and animal species. Local governments have the local knowledge and community networks necessary to continue to build invasive plant and animal management capability and commitment within communities.

2.0 Current and Potential occurrence of feral deer, pigs and goats across Australia

Feedback from local governments in Queensland indicate that feral deer and pigs present a significant problem across Queensland and feral goats to a lesser extent. A species prioritisation process undertaken at a regional scale across Queensland local governments in 2016/2017 showed that of the 10 regions across Queensland:

- Six of the ten regions consider feral deer to be a high priority species for control
- Eight of the ten regions consider feral pigs to be a high priority species for control
- Nine of the ten regions consider feral goats to be a low priority, whilst one region considered them to be a high priority.

This data shows that there is wide spread occurrence of feral pigs and deer across the Queensland landscape as well as a concern for the potential impacts should further spread occur. At present it is unclear the exact extent of these species and further work needs to be completed to understand current and potential range of each of these species.

Recommendation 1: The LGAQ recommends a comprehensive survey of feral deer, pigs and goat presence to establish a true understanding of the risks posed by their potential spread.

Recommendation 2: The LGAQ recommends species ecology research be completed to identify the potential to spread based on habitat and climate suitability.

Recommendation 3: The LGAQ recommends the establishment of population density thresholds for each species to ensure an adequate understanding of the numbers that need to be controlled to have a permanent impact.

3.0 The likely and potential biosecurity risks and impacts of feral deer, pigs and goats on the environment, agriculture, community safety and other values

Feral pigs, deer and goats are classed as a restricted invasive animal (category 3) under the *Biosecurity Act 2014*, meaning that they must not be moved, fed, given away, sold, or released into the environment without a permit.

3.1 Feral pigs

The Queensland Feral Pig Strategy indicates that feral pigs have major economic, environmental and social impacts in Queensland. They are designated as a 'threatening process' under the *Environmental Protection Biodiversity Conservation Act 1999*.

In 2004, the agricultural impacts of feral pigs in Queensland exceeded \$50 million per year through predation, competition and destruction of crops and pastures. While harvesting of feral pigs contributes some \$10 million to the Queensland economy and contributes to reducing their impacts, harvesting may also, contribute to the sustainability of some feral pig populations.

The environmental impacts of feral pigs in riparian zones, wetlands and rainforests include destruction of plants, animals and habitat; disturbing soil with secondary erosion; siltation; and water quality effects. These impacts are frequently reported by Queensland local governments and are of major concern.

Feral pigs also pose a disease risk to humans and native and domestic animals as they have the potential to harbour many exotic and endemic diseases.

3.2 Feral deer

The Queensland Feral Deer Strategy established in 2013 indicates that four species of deer have formed feral populations in Queensland. There is a considerable body of evidence indicating that large deer populations have significant agricultural, environmental and social impacts. These include: competing with livestock for pasture; carrying pests and diseases that can affect livestock; damaging crops; grazing of certain native plants, causing changes to floristic composition and structure; crossing roads and causing motor vehicle accidents; damaging revegetation, landscaping, gardens and parks. There is anecdotal evidence that deer abundance is increasing in Queensland.

In the urban environment, feral deer can have a significant impact on public and private amenity through damage caused to vegetation including private gardens, parkland and street trees. Reciprocally, these costs transfer to local government through replacing damaged street trees, public parks, gardens and fencing.

Road safety risks in urban areas are of significant concern to Queensland local governments particularly in urban areas where broadscale control options are limited due to higher population densities.

Recommendation 4: The LGAQ recommends the Australian Government consider listing the impacts posed by feral deer as a key threatening process under the *Environment Protection and Biodiversity Conservation Act 1999*.

3.3 Feral goats

Feral goats are listed as a key threatening process for competition and land degradation under the *Environment Protection Biodiversity Conservation Act 1999*.

Goats are generalist herbivores, eating a wide variety of plant foods. As a selective browser, the feral goat can have a profound effect on a plant community over a relatively short period. The amount of vegetative cover may be severely depleted because of overuse and trampling by feral goats, leading to soil erosion. Feral goats compete with native fauna for food, shelter and water, particularly in semi-arid areas. Feral goats are regarded as pests by some pastoralists because they compete with domestic livestock for resources. Overgrazing is a major contributing factor to land degradation in the mulga lands of Queensland. Feral goats, along with native and domestic herbivores, must be managed as one component of total grazing pressure. Feral goats are also susceptible to exotic livestock diseases including foot-and-mouth disease. Unchecked, wild herds could play a major role in the spread of infection and act as a reservoir if these diseases are introduced to Australia. Feral goats are also prone to a number of diseases currently in Australia.

Feral goats have been reported to be of concern in central western Queensland, however, goats are generally not considered to be as great a threat by Queensland local governments. There is the potential for this to change if feral goat populations are allowed to increase.

4.0 The effectiveness of current state and national laws, policies and practices in limiting spread and mitigating impacts of feral deer, pigs and goats

In Queensland, everyone has a General Biosecurity Obligation to manage species listed in the *Biosecurity Act 2014*. Under this Act, Queensland local governments are also required to establish a biosecurity plan. This plan is developed using a Risk Based Decision-making process and outlines how each of these risks will be managed. Many local governments also develop a compliance strategy in concurrence with the biosecurity plan which clearly articulates how the General Biosecurity Obligation (GBO) may be discharged by landholders in relation to particular species. Many Queensland local governments include feral deer, pigs and goats within their local biosecurity plans and expect action to be taken by landholders to meet their GBO.

Queensland local governments invest significant effort and resources to deliver coordinated and targeted control programs to reduce the impacts of feral animals. This is a difficult task for species that move across local government boundaries. Coordinated, landscape wide approaches are required to ensure maximum success in controlling mobile invasive species.

Recommendation 5: The LGAQ recommends the harmonisation of definitions and management expectations of feral deer, pigs and goats across jurisdictions to assist in coordinated control approaches.

Under the *Biosecurity Act 2014*, restricted matter is biosecurity matter found in Queensland and has a significant impact on human health, social amenity, the economy or the environment. Specific actions are required to limit the spread and impact of this matter by reducing, controlling or containing it. Feral deer, pigs and goats are all considered restricted matter, categories 3, 4 and 6 which means that they must not be moved, fed, given away, sold, or released into the environment without a permit. However, concern has been expressed by Queensland local governments regarding the definition of feral animal in the Act.

The *Biosecurity Act 2014* Schedule 4 describes the following:

1. A *feral* animal is an animal that –
 - (a) is living in a wild state; and
 - (b) is not being farmed or kept for any other purpose.

For paragraph 1(b), an animal is being farmed or kept for another purpose only if it is kept in an escape-proof enclosure, cage or other structure.

Queensland local governments have reported that previously 'feral animals' are being kept as livestock in some circumstances. One of the biggest concerns in relation to these feral animals is the deliberate or accidental release back into the wild as has been encountered by several local governments. It has been noted by one council that its Rusa deer population is a result of escaped farmed deer and the cost to council to remove the deer population will be in excess of \$100 000, without taking into account the costs of the damage the species may incur prior to their removal.

Under the Act, it is up to each local government to specify fencing requirements to fulfil the requirements of 'escape-proof enclosure, cage or other structure' through the enactment of local laws to ensure accidental release of these species does not occur. This piecemeal approach does not ensure favourable outcomes for the community. A recognised 'standard' for keeping these animals as livestock which include specific housing requirements (such as fence standards, etc), and record keeping requirements, whereby landholders must keep up to date and accurate records of how many animals they are keeping, with penalties applicable for unaccounted animals may lead to a reduction in the number of potential invasive species released into the environment.

Recommendation 6: The LGAQ recommends the establishment of clear national guidelines to ensure a uniform approach to the containment of feral animals.

The fact that all three of these species are used for meat or recreational pursuits complicates and hinders the willingness of landholders to take control action. If control isn't taken in a comprehensive manner across the landscape, continued efforts will be futile. Incentives for landholders to participate may be a useful tool to encourage landscape wide approaches to reduce populations to below density thresholds.

Recommendation 7: The LGAQ recommends the establishment of national incentive programs in conjunction with other control mechanisms to encourage individual landholders to contribute to feral animal control programs.

5.0 The efficacy and welfare implications of currently available control and containment tools and methods, and the potential for new control and containment tools and methods

Queensland local governments undertake a range of different control methods to alleviate the impacts of feral deer, pigs and goats including baiting, trapping and ground/aerial shooting. All of these methods have differing degrees of resourcing requirements and effectiveness. Greater understanding of the habits and

requirements of each of these species will assist in the development of more effective control methodologies in the future.

Recommendation 8: The LGAQ recommends ecology studies for each of these species in a range of different bioregions to inform the development of more effective control methodologies.

Regardless of the effectiveness of any one control methodology, Queensland local governments acknowledge the importance of collaborative, integrated control programs to ensure positive results are realised.

The following include ways to improve the efficacy and welfare implications of current control and containment tools:

5.1 Feral Pigs

The use of 1080 baits are a viable option for some landholders. This control method is decreasing in popularity due to the high doses required to kill feral pigs and the risks associated with non-target species. The use of 'HogHoppers' as a tool to directly distribute bait may become a more viable option for the continued use of 1080 baiting that minimises risks, but further trials are required. Trapping of feral pigs is a resource intensive and time-consuming process and often only results in the capture of small numbers. Ground and aerial shooting continued to be used as successful control methodologies, but the costs associated with aerial shooting can be restrictive. Some Queensland local governments also implement bounty programs for feral pigs.

5.2 Feral Deer

Due to the often erratic nature of deer, there can be animal welfare issues associated with the use of traps as the deer often become injured as they try to avoid being trapped. Deer pose serious road safety concerns, particularly in areas with higher urban populations. In these urban and peri-urban areas there are also less practicable control options available to local government. Local governments in Queensland support the recently announced Centre for Invasive Species Solutions best practice deer management guidelines research project.

Queensland local governments have advocated to the State Government for a change in legislation to allow authorised officers under the *Biosecurity Act 2014* the ability to use silencers for the control of feral animals in urban / peri-urban areas, as is the case in New South Wales. To date, these advocacy efforts have been unsuccessful.

Recommendation 9 The LGAQ recommends the development of new control methodologies for feral deer, particularly in urban and peri-urban areas.

Recommendation 10: The LGAQ recommends that Queensland local governments are consulted in the development of national best practice management guidelines for the control of feral deer.

6.0 Priority research questions

The following are considered priority research questions for Queensland local governments to guide future research into feral deer, pigs and goats to provide a greater understanding of:

- how the distribution of invasive species correlates to the distribution and abundance of predators?
- how the presence of invasive species affects each ecosystem type to establish landscape priorities for management?
- movement patterns of invasive species at a landscape scale?
- the size of the core herd at a landscape scale and how many animals would need to be removed to impact upon population growth?
- how effective is invasive species management when risk assessments and responses are delegated to land managers and local governments to manage independently?
- which management strategies are resulting in the greatest decrease in numbers of invasive species and are any practices resulting in population growth ?



- what management technologies and new/ emerging techniques are being deployed or trialled across the country and in what environments are they most effective?
- differences in regulatory frameworks associated with the classification of invasive species, and management options available (eg. firearms laws, animal welfare etc) affect population size across jurisdictions?
- what would best practice deer management look like nationally, and in urban areas?
- how the spread and impacts of feral animals will alter under climate change scenarios?

7.0 The benefits of developing and fully implementing national threat abatement plans for feral deer, pigs and goats

Feedback from local government in Queensland indicates there is currently a lack of coordination between existing Federal, State and local government programs. The LGAQ proposes a whole of government approach to appropriately manage feral animals. National threat abatement plans may provide the vehicle for a whole of government collaboration and the establishment of cost sharing arrangements. Other benefits include consistency in the prioritisation and management of invasive species; and specification of preferred humane control methods.

National threat abatement plans would also provide a focus for local government to guide local biosecurity planning and could be used to guide public awareness campaigns that have the greatest impact on achieving voluntary landholder compliance.

Local governments in Queensland in partnership with the LGAQ and Biosecurity Queensland have developed ten Regional Pest Management Sub-committees across the state. These sub-committees have been established to create a governance framework to prioritise and implement actions that have regional invasive plant and animal benefits. As such, Queensland local governments are ideally placed to partner with other key players to implement national threat abatement plans with commensurate funding and resourcing support.

Recommendation 11: The LGAQ recommends the establishment of collaboratively developed national threat abatement plans that are fully implemented and appropriately resourced.

8.0 Other related matters

The inclusion of wild dogs would have been a beneficial addition to this inquiry. Significant investment has been made by the Queensland State Government and landholders into the establishment of cluster/exclusion fencing to assist in minimising the impacts of wild dogs in agricultural areas, particularly those wishing to enter/re-enter sheep production. The occurrence of wild dogs in urban/peri-urban areas is also a significant issue for Queensland local governments and the tools that can be used in highly populated areas are limited. An understanding of the impacts of wild dogs to social amenity and the environment in these areas is needed; and the development of a national threat abatement plans for wild dogs would be well received by Queensland local governments.

Recommendation 12: The LGAQ recommends the establishment of a National Threat Abatement Plan for wild dogs.

Recommendation 13: The LGAQ recommends research into effective control measures for wild dogs in urban and peri-urban areas.

Please don't hesitate to contact Kristy Gooding, Lead – Natural Assets and NRM on _____ or at _____ should you wish to discuss any aspect of this submission.