

2 November 2018

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

Dear Committee Secretary,

Re: Senate inquiry into the impact of feral deer, pigs and goats - Manningham Council Submission

Manningham welcomes this opportunity to make a submission to this Senate inquiry. While pigs and goats have potential to be a problem in Manningham, our main concern is the rapidly increasing feral deer population which is not only having a growing negative impact across Victoria but also in Melbourne's peri-urban areas such as Manningham.

### Manningham

Manningham occupies 113 square kilometres and is within 30 km of the centre of Melbourne. The Yarra River forms the northern municipal boundary. The western half of the municipality is urban and the eastern half is peri-urban 'Green Wedge'. This Green Wedge area contains a mix of rural-residential properties and other uses including agriculture, vineyards, hobby farms, environmentally significant forested properties, the Yarra Valley Parklands and Warrandyte State Park. The Green Wedge contains areas of State, Regional and Local environmental significance with rare and threatened species.

### Feral deer impacts

Manningham supports landholders and Landcare groups to conduct deer monitoring and control works. The Sambar deer species are the most common and have the capacity to move over 10 kilometres in one day, regularly ranging across several municipalities. While some action by local government is appropriate, it is difficult for us to deliver a comprehensive approach. To coordinate large scale, long term, inter-agency deer management, a capable State or Federal Government agency with authority across all land tenure is required and this is currently lacking.

The Victorian Government is currently drafting a Deer Management Strategy (VDMS). While a good start has been made with the current draft, we believe the Strategy needs to be strengthened towards an overall goal of significantly reducing the deer population, particularly in peri-urban areas, so as to reduce the impact of deer on the environment, on agriculture and to reduce the public safety risk that deer pose in urban and peri-urban environments.





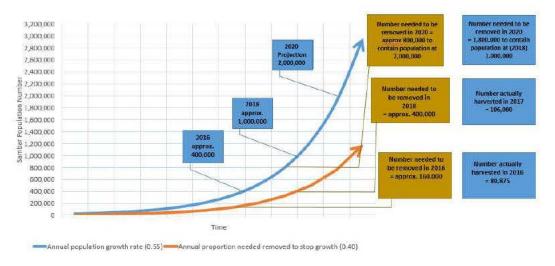
Terms of Reference - The impact of feral deer, pigs and goats in Australia, and national priorities to prevent the problems worsening for the natural environment, community and farmers, including:

### A. The current and potential occurrence of feral deer, pigs and goats across Australia

The potential range of deer in Australia is far greater than their present distribution as shown by maps of current and potential distribution in Davis et al. (2016). All deer species could occupy almost the entire continent so containment of the current populations should be a national priority.

Generally, deer have moved into Manningham from neighbouring municipalities to our north and east, particularly along the Yarra River corridor. We have photographic, reported sightings and other evidence that indicates that deer exist throughout the Manningham's Green Wedge in the suburbs of Warrandyte, Wonga Park and Park Orchards.

### Victorian Projected Population Growth – Sambar Deer



Graph 1: Victorian Projected Population Growth for Sambar Deer, Model based on 'Estimates of maximum annual population growth rates of mammals and their application in wildlife management' (Hone, Duncan, Forsyth 2010).

As shown in Graph 1 above, there is a clear urgent need to for an extensive Sambar deer control program:

- There is approximately 1 million Sambar deer in Victoria in 2018.
- According to the deer projection formula in the Hone et al 2010, 40% or 400,000 Sambar Deer need to be removed in 2018 to limit the population to 1 million.
- The VDMS states that about '106,000 deer were harvested by recreational hunters in 2017'
- Assuming a similar 2018 harvest, there is an approximate short fall of 300,000 deer that need to be removed to contain the deer population to 1 million.



 The maximum annual population growth rate for Sambar deer is 55% which could lead to a population of 2 million by 2020 if an adequate control program is not implemented.

This trend will continue until the deer have destroyed all vegetation and the habitat can longer support them, leading to many native flora and fauna species extinctions.

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

#### **Environment**

Manningham's Riparian Woodland & Creekline herb-rich Woodland are currently the most at risk Ecological Vegetation Communities in the municipality. Manningham is losing its mid-story vegetation with the following species in rapid decline from deer activity: Prickly Current Bush, Victorian Christmas Bush, Hazel Pomaderris, Slender Pomaderris, Black and Silver Wattles, Blackwoods and Dusty Miller are currently the most favoured plants. Native moss cover is also in decline from extensive wallowing. Threatened species effected include: Powerful Owls, Brushtail Phascogals, Common Dunnart, Wine-lipped Spider-orchid, Cinnamon Wattle and Roundleaf Pomaderris (Nationally Threated species that occurs only in Middle and Upper Yarra Catchment including the Manningham municipality). Deer are also spreading weeds, in particular Neat Feather Moss which prevents native plants from germinating or regrowing.

### Community safety

Due to their size and higher centre of gravity, feral deer pose a much higher traffic hazard than smaller wildlife. Obviously, traffic volume and deer population density determines the level of risk and there has been a significant increase in deer-vehicle collisions throughout Melbourne's periurban areas causing substantial damage. In 2017, a deer was filmed running across a major highway in Ringwood and another stag entered a Ringwood funeral home causing \$100,000 of damage.

Male stags are known to attack humans or pets with their antlers if they are trapped and feel threatened. Numerous incidents in school yards have been reported in Melbourne's eastern suburbs including injuries to two students and high calibre firearm use to destroy stags during school hours.

Feral deer are also found in Melbourne's water catchments, threatening drinking water supply as their faeces contain the Cryptosporidium parasite. In 1998, Sydney's Water treatment infrastructure upgrade cost \$350 million following Cryptosporidium contamination.

There are now also public safety issues with illegal amateur deer hunting in high population areas.

#### Agriculture

Feral deer are also a significant problem for agricultural producers as they eat and destroy produce with a particular impact on Yarra Valley vineyards and strawberry growers. The high cost of deer control and fencing is causing substantial financial hardship.



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

Victorian local governments lack deer management expertise, particularly with safe use of firearms in peri-urban areas. State and Federal Government leadership and significant resourcing is urgently required to ensure a safe, best practice, large scale, long term, strategically coordinated, interagency management approach across land tenure, including for Melbourne's peri-urban areas.

The need for leadership was recognised in the recommendations of the 'Victorian Parliamentary Inquiry into the control of invasive animals on Crown land 2017' including recommendation 33: 'designate one government body that has overall responsibility and accountability for invasive pest animal control in Victoria.' However, the draft VDMS is unclear on which government body.

As shown in Graph 1 and the dot point discussion above, exponential population growth for Sambar deer means that is better to act early rather than later because the scale of the deer control task and its associated cost grows significantly over time.

#### Legal Status of Deer in Victoria

Manningham Council believes that current state and national laws, policies and practices are quite ineffective in limiting the spread of deer and mitigating their impacts – this includes the 'game' status of the Sambar, Fallow, Red and Hog deer species under the Victorian *Wildlife Act 1975*. In the wild, deer (and pigs and goats) are invasive pests and should be unequivocally recognised as such. All feral deer species in Victoria need to be declared 'pests' in legislation or policy for the following reasons. Ideally, legislation and policy for invasive species should be consistent across Australia.

- The nomination of deer as protected 'game' under the Wildlife Act 1975 was made when
  deer were far fewer in number and were deemed in need of protection for recreational
  hunting purposes deer are now an established, self-sustaining invasive pest in south
  eastern Australia, with the potential to establish across the entire continent.
- 'The reduction in biodiversity of native vegetation by Sambar deer' is listed as a Potentially Threatening Process under the Flora and Fauna Guarantee Act 1988.
- It would support more effective State Government management of deer by resolving the current conflict between managing protected 'game' versus a 'pest'.
- It would enable the establishment of a compliance regime to prevent the deliberate transport of pest deer to new areas and it would allow for local laws to be created to require deer control on private land if necessary

#### Rusa Deer

The presence of Rusa deer in Victoria needs to be urgently managed because of the significant risk they pose due to being more successful breeders than the other deer species (Hone 2010).



## D. 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

The closer the deer are to urban areas, the more difficult and expensive control programs become. It is easier to reduce deer numbers in rural areas and limit urban encroachment. Shooting in periurban and urban areas is not always possible due to human safety risks. Therefore, research into additional alternative control methods suitable for the peri-urban environment is urgently required.

As deer numbers increase and shooting is the only humane control method currently, more professional shooters are required. It is important that any professional or volunteer shooter involved in deer control programs, particularly in peri-urban and urban areas, have a credible government certification. This is yet to be included in the VDMS.

Significant funds need to be allocated for professional culling programs and research into additional control methods is necessary, including baiting, biological and genetic controls, trapping options, feeding stations and deterrents. We can learn from deer management experience in New Zealand, New Caledonia, the United States and Canada.

### E. Priority research questions:

- Safe Deer control methods for urban and peri-urban areas.
- Documentation of Sambar deer movements and behaviours to assist with control and prevention of deer expansion into environmentally sensitive and peri-urban areas.
- Mapping of current Rusa Deer presence in Victoria, to facilitate prevention of this species establishing in the state.
- Develop an understanding of deer carrying capacity for each ecosystem, especially if Victoria is to establish a deer management zone model.
- Measure the collective economic costs of deer on environmental management, agriculture and social impacts.
- Measure the impact deer have on ecological resilience in a changing climate and drought conditions.
- Measure the impact drought has on deer population growth.
- Develop national standard monitoring protocols of deer numbers and impacts, to assist land managers to establish their own monitoring and also to ensure data can be comparative across states.

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

The development of national threat abatement plans for feral deer, pigs and goats would be ideal. We would support a plan that prevents the further spread of deer and strongly mitigates against the negative impacts that deer are having.



Expanding deer populations in the outer suburbs of Melbourne are significantly increasing environmental, agricultural, cultural and human safety risks and impacts. Local government and key stakeholders need to empowered and supported by government to be part of the solution. This should include government leadership, strategic direction, co-ordination across land tenure, expert advice, training, funding, resources, changes in legislation, firearms use certifications and other state or national standards.

We look forward to meaningful outcomes from the Senate Inquiry to address the growing national feral deer problem. Should you require any additional information or comment, please contact Samantha Bradley, Senior Environmental Planner, Manningham Council on or email

Yours sincerely,

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