



AUSTRALIAN DEER ASSOCIATION – NSW INVASIVE SPECIES MANAGEMENT REVIEW



Credit Penny Cumming

The Australian Deer Association Inc. (ADA) is a nationwide not-for-profit member organisation established in 1969; since then, it has advocated for public land access for recreational deer hunting and provided and contributed to deer education, management, and research.

As a part of the review, we will provide feedback on the following questions:

- To what extent are the NSW environment, industries and communities currently impacted by invasive species?
- To what extent do you think existing programs in NSW are effectively managing invasive species?
- What, if any, are the key barriers to effective management of invasive species?
- What are the future risks posed by invasive species to the NSW environment, industries and communities?
- What opportunities do you see to improve the outcomes of invasive species management in the future?

To what extent are the NSW environment, industries and communities currently impacted by invasive species?

Wild deer in New South Wales provide a significant positive economic impact via recreational deer hunting. According to a 2017 government-commissioned report by RMCG, game licence hunters contributed \$119m in gross state product and generated 860 full-time jobs¹.

With this data now being six years old and a new survey being completed in 2023, it is expected that these economic contributions have only grown to reflect an increase in the popularity of recreational deer hunting shared in other states².

According to a survey of national land managers, the degree of wild deer being a problem resulted in 89% stating wild deer were not a problem, 7% a minor problem, and only 4% a major problem³.

This contrasts strongly with native animals and birds, such as kangaroos, considered a major problem by 37% of surveyed land managers and a minor problem by a further 29%⁴.

This would suggest that agriculture faces more significant challenges presented by kangaroos than wild deer. The minimal growth between 2016 and 2019 surveys of land managers of wild deer being considered a major problem (3% to 4%⁵) suggests that current deer management measures effectively minimise negative impacts on agriculture.

¹ Economic Impact of Recreational Hunting in NSW, RMCG, 2017

² Game Licence Statistics, Summary Report, Game Management Authority/Vicaris, 2023

³ Steneliev, N. and Karpans, R. (2021). Pest Animal and Weed Management Survey 2016-19: national land manager survey results, ABARES research report, Canberra, ACT, Australia. doi: 10.25814/19q6y60

⁴ Steneliev, N. and Karpans, R. (2021). Pest Animal and Weed Management Survey 2016-19: national land manager survey results, ABARES research report, Canberra, ACT, Australia. doi: 10.25814/19q6y60

⁵ Steneliev, N. and Karpans, R. (2021). Pest Animal and Weed Management Survey 2016-19: national land manager survey results, ABARES research report, Canberra, ACT, Australia. doi: 10.25814/19q6y60

To what extent do you think existing programs in NSW are effectively managing invasive species?

Based on wild deer distribution and abundance data from the Department of Primary Industries, the highest abundance of wild deer appears to remain concentrated in the same areas between 2016⁶ and 2020⁷. This would suggest that the New South Wales government's blend of deer management efforts and recreational hunting is having a positive impact.

It also provides valuable data about where deer management programs should be deployed and the opening of more public land for recreational deer hunting as part of a long-term management matrix. It is recommended that programs be placed in areas more likely to act as 'wildlife corridors' that would enable wild deer to expand their distribution and relevant peri-urban areas.

Furthermore, the minimal growth in land managers nominating wild deer as a significant problem supports the notion that deer are effectively managed within the current arrangements.

What, if any, are the key barriers to effective management of invasive species?

Whilst recreational deer hunting can occur within some State Forests, significant tracts of public land in New South Wales remain inaccessible; these include, but are not limited to, National Parks and State Conservation areas.

The R-Licence system in New South Wales has proved effective at managing and regulating deer hunting as a sustainable recreational use of public land compatible with other park users.

The New South Wales government has the opportunity to address this lack of equitable access and increase public land access for recreational deer hunting, which will result in a larger recreational harvest of wild deer.

⁶ https://www.dpi.nsw.gov.au/_data/assets/pdf_file/0010/717598/All-deer2016.pdf

⁷ https://www.dpi.nsw.gov.au/_data/assets/pdf_file/0004/1044880/Feral-deer-in-all-state-forests-in-south-western-nsw-abundance-2020.pdf

What are the future risks posed by invasive species to the NSW environment, industries and communities?

Wild deer play a minor role, if any, and are primarily at a low risk of disease transmission between livestock and people. A growing body of scientific evidence supports this, with research dating back to the 1960s.

This was recently reiterated by the New South Wales Minister for Agriculture Tara Moriarty, who recently said in parliament, *"Broadly, the research suggests a low risk of transmission from wild deer to livestock and humans in Australia."*⁸

Recent research identifies that Australian Deer are not carriers of Bovine Herpesvirus despite it being prevalent in livestock and the sharing of pastoral habitats by cattle and wild deer across Australia⁹.

PCR-based screening of deer serum and blood samples detected no active infection of Sarcocystis¹⁰.

Wild deer also have low levels of seroprevalence of pestivirus (3%) compared to cattle with high rates (53%)¹¹. Deer experimentally infected have a low ability to shed the virus or display clinical symptoms and can seldom transmit the virus to cattle¹².

Wild deer also appear relatively insignificant regarding Foot and Mouth Disease, based on recent studies in Australia and overseas experiences during outbreaks.

The lack of endemic Foot and Mouth Disease (FMD) in deer populations or detection during large outbreaks in the UK in 2001 suggests that, due to behavioural attributes or low susceptibility, their transmission rates are likely to be lower than in cattle¹³.

There is an absence of data regarding FMD transmission from deer to cattle¹⁴ and deer are not likely to be important hosts for the maintenance of FMD in the wild¹⁵.

This was further supported by comments made by a former Chief Veterinary Officer of the United Kingdom who spoke about the lived experience during their 2001 outbreak, where *"feral animal populations did not have a particularly significant impact on the spread."*¹⁶

8. New South Wales, Ministry (Legislative Council). (18 October 2023). 81. Tara Moriarty, Minister for Agriculture.

9. Human JL et al. (2023) Wildlife Research, 50(8-9), 593-602. doi:10.1071/WR22118

10. Human JL et al. (2023) Wildlife Research, 50(8-9), 593-602. doi:10.1071/WR22118

11. Human JL et al. (2023) Wildlife Research, 50(8-9), 593-602. doi:10.1071/WR22118

12. Human JL et al. (2023) Wildlife Research, 50(8-9), 593-602. doi:10.1071/WR22118

13. Faaborg, C., Hill, E., Woodford, L.C., Hampton, J., Murphy, B. and Ramsey, D. (2023) The role of wild deer in the transmission of diseases of livestock.

14. Faaborg, C., Hill, E., Woodford, L.C., Hampton, J., Murphy, B. and Ramsey, D. (2023) The role of wild deer in the transmission of diseases of livestock.

15. Faaborg, C., Hill, E., Woodford, L.C., Hampton, J., Murphy, B. and Ramsey, D. (2023) The role of wild deer in the transmission of diseases of livestock.

16. New South Wales, Ministry (Legislative Council). (18 October 2023). 82. Sarah Mitchell, Deputy Leader of the Opposition in the Legislative Council.

What opportunities do you see to improve the outcomes of invasive species management in the future?

National Parks, Regional Parks, and State Conservation reserves are all types of land tenure within New South Wales that provide opportunities for recreational activities¹⁷. However, recreational deer hunting is not one of them.

There is an opportunity to expand the successful R-Licence system used on state forests¹⁸ to additional land tenures such as these. This will enable more equitable access to public land by recreational deer hunters with minimal, if any, impact on other recreational users within a park.

As of 2017, 19,000 R-Licence holders contributed \$119m to the New South Wales economy, providing full-time employment for 860 people¹⁹. This number is expected to have grown significantly since then, and expanding access to public land will further facilitate this.

It is also critical that the role, or lack thereof, wild deer play in the risk of livestock disease transmission must be acknowledged and reflected in policy and material produced by government and bureaucracy. This will help prevent the spread of misinformation, mature the conversation about deer management and help deliver more effective and sustainable outcomes.

¹⁷ <http://www.environment.nsw.gov.au/topics/parks-and-land-use/conservation-reserves/conservation-reserve-types.aspx>

¹⁸ <http://www.parks.nsw.gov.au/hunting/where-to-hunt>

¹⁹ [Economic Impact of Recreational Hunting in NSW \(MCS\) 2017](#)



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