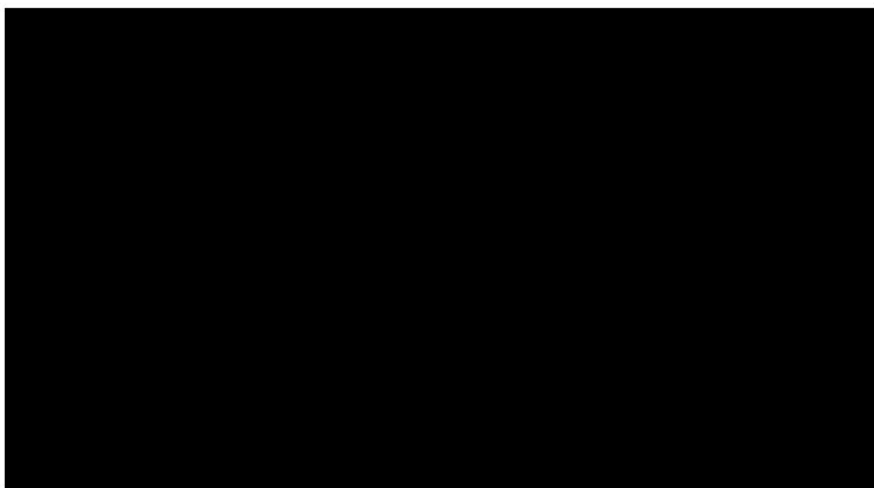


Submission to the NSW Invasive Species Management Review

10 November 2023

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The NSW Young Lawyers Animal Law Sub-Committee (**Sub-Committee**) makes the following submission to the NSW Invasive Species Management Review.

NSW Young Lawyers

NSW Young Lawyers is a Committee of the Law Society of New South Wales that represents the Law Society and its members on issues and opportunities arising in relation to young lawyers i.e. those within their first five years of practice or up to 36 years of age. Through its 15 sub-committees, each dedicated to a substantive area of law, NSW Young Lawyers supports practitioners in their professional and career development by giving them the opportunity to expand their knowledge, advance their career and contribute to the profession and community.

The Sub-Committee comprises a group interested in laws regulating the treatment of animals. The Sub-Committee aims to raise awareness and provide education to the legal profession and wider community, while increasing understanding about the importance of protecting animals from abuse and neglect. A common theme amongst the Sub-Committee is a passion and desire to use legal skills and the law to improve protections for animals.

The Sub-Committee welcomes the opportunity to make a submission on this review, and makes comments on key review questions 2, 3, and 6.

Summary of Recommendations

The Sub-Committee submits that:

1. Commonly used lethal methods of invasive species management have proven ineffective as long-term solutions in a number of cases:
 - a. Lethal methods of population control often fail to deliver a long-term solution for invasive species management.
 - b. Even sustained programs do not guarantee success in reducing invasive species populations.
 - c. Often-used lethal control methods may also increase the harm to the native wildlife which is sought to be protected.
2. The Sub-Committee would therefore urge the Natural Resources Commission to advise the NSW Government to:
 - a. define management goals to include reference to a reduction of negative impacts associated with invasive species, rather than simply reduction in invasive species population numbers or deaths;
 - b. improve the availability of useful data by ensuring that all invasive species management programs comprehensively monitor outcomes for target species as well as assets;
 - c. investigate and aim to address human behaviours that may be creating, contributing to, or failing to reduce, the negative outcomes associated with invasive species;
 - d. invest in the development and implementation of more sophisticated, non-lethal, control methods, aimed at delivering long-term outcomes; and
 - e. consider the impact of environmental settings on the suitability of various management methods.
3. The Sub-Committee submits that the key barrier to the effective management of invasive species is the lack of research into, and application of, alternative, non-lethal methods of control.

4. The Sub-Committee submits that concerted investigation, research, and implementation of humane, non-lethal invasive species management methods present valuable opportunities to improve the outcomes of invasive species management in the future.

To what extent do you think existing programs in NSW are effectively managing invasive species, and what, if any, are the key barriers to effective management of invasive species?

1. The Sub-Committee submits that a number of commonly used methods of invasive species management have proven ineffective, and that new methods ought to be more concertedly investigated.
2. Lethal methods of population control fail to deliver a long-term solution for invasive species management.¹ Eradication of major invasive species is unlikely to be achieved by lethal methods, except within confined areas such as in enclosures and on islands; in Australia's long history of reliance upon such methods, no introduced species has ever been eliminated from the mainland.²
3. Even sustained programs do not guarantee success in reducing populations; feral camels have steadily increased in number and in range despite consistent attempts at control by lethal methods.³
4. Often-used lethal control may actually increase the harm to the native wildlife sought to be protected by such methods of control. For example, an analysis of malleefowl conservation programs dependent on fox baiting showed that baiting did not significantly impact fox populations. It was further discovered that fox presence was even conducive to malleefowl conservation.⁴ In another instance, long-term baiting of foxes in Western Australia successfully reduced population densities, but at some sites this resulted in higher predation of threatened mammals by cats.⁵ Therefore, when effective management is only assessed by reference to the reduction of invasive species population numbers, rather than reduction of negative impacts associated with invasive species, the overall effectiveness of the programs can be adversely impacted.

¹ Sophie Riley, 'Model Codes for Humane Treatment of Animals: Australian Law and Policy on Lethal Control of Pests' (2015) 18:4 *Journal of International Wildlife Law & Policy* 276, 280 – 281.

² Quentin Hart, Mary Bomford, 'Australia's Pest Animals: new approaches to old problems', *Science for Decision Makers* – Bureau of Rural Sciences (2006), 2; 5.

³ Australian Department of Sustainability, Environment, Water, Population & Communities, *National Feral Camel Action Plan: A National Strategy for the Management of Feral Camels in Australia* (2010) 16, cited in Riley, above n 1, 282.

⁴ J.C. Walsh, K.A. Wilson, J. Benshemesh, H.P. P Possingham, 'Unexpected Outcomes of Invasive Predator Control: the importance of evaluating conservation management actions' (2012) 15 *Animal Conservation* 319.

⁵ P.J. De Tores & N.J. Marlow (2012) 'The relative merits of predator-exclusion fencing and repeated fox baiting for protection of native fauna: five case studies from Western Australia' in M.J. Sommers & M.W. Hayward (eds), *Fencing for conservation: restriction of evolutionary potential or a riposte to threatening processes?* (Springer, New York), 21-42, cited in Tim S. Doherty, Euan G. Ritchie, 'Running head: Rethinking invasive predator management' (Unpublished Manuscript, *Territorial Ecosystems*), 5.

5. Existing methods can also present a more direct risk of harm to non-target species. A study which investigated the uptake of 499 poisonous 1080 baits by non-target animals in eastern Australia identified that 13 non-target species were at high risk of mortality from consuming the baits.⁶
6. Furthermore, even methods that are not designed to kill target species can have serious consequences for non-target animals. Data collected on soft-catch leg-hold trapping aimed at capturing feral cats at six Western Australian sites over 18 years revealed that 431 non-target individuals were captured, including 232 belonging to native species. Amongst native fauna, severe injuries were observed in 33% of birds, 21% of reptiles and 12% of mammals captured.⁷
7. The recently approved Felixer grooming trap attempts to overcome risk of harm to non-target species by using laser, cameras and artificial intelligence to identify cats and spray them with toxic gel.⁸ However, it is far from infallible – one study found that feral cats were successfully identified by the Felixer in just under half of the instances in which cats passed the unit (48.1%), whilst Tasmanian devils and common wombats were targeted in 23.1% and 12% of passes respectively.⁹
8. Recently, more aggressive, aerial-based poison baiting and shooting programs were adopted in 2020 in the wake of summer bushfires.¹⁰ While the justification is understandable, with native species in a vulnerable state (reduced population, diminished habitat, less food availability), these are the same reactive methods that have been used for decades without the desired result, the shortcomings of which have been addressed above.
9. The Sub-Committee submits that the above limitations can only be addressed by re-evaluating goals and approaches to invasive species management. The Sub-Committee would therefore urge the Natural Resources Commission to advise the NSW Government to:

⁶ Bronwyn A Fancourt, Christine Zirbel, Peter Cremasco, Peter Elsworth, Glen Harry and Matthew N. Gentle, 'Field assessment of the risk of feral cat baits to nontarget species in eastern Australia' (2021) 18(1) *Integrated Environmental Assessment and Management* 224, 1.

⁷ Chantal Surtees, Michael C. Calver, Peter R. Mawson, 'Measuring the Welfare Impact of Soft-Catch Leg-Hold Trapping for Feral Cats on Non-Target By-Catch' (2019) 9 *Animals* 217, 1.

⁸ 'Felixer grooming trap to be rolled out as part of Australia-first strategy to control feral cats', *Australian Broadcasting Corporation* (Web Page, 28 June 2023) <<https://www.abc.net.au/news/2023-06-28/deadly-tool-unveiled-as-part-of-crack-down-in-australia-first/102535300>>.

⁹ Holly Rickards, John L. Read, Chris N. Johnson, Menna E. Jones, Matthew D. Pauza, Joss Bentley, Andry Sculthorpe, Morgan Humphrey and Rowena Hamer, 'Is the Felixer cat control device safe for marsupial carnivores' (2022) 50(5) *Wildlife Research* 356, 360.

¹⁰ Department of Planning, Industry and Environment, *Wildlife and Conservation Bushfire Recovery - Immediate Response* (January 2020).

- a. define management goals not only in relation to reduction in invasive species population numbers or deaths, but also to include reference to reduction of broader negative impacts associated with invasive species - for example, outcomes assessed could include the response of native wildlife or impact on agricultural assets;
 - b. improve the quality and quantity of available data by ensuring that all invasive species management programs comprehensively monitor outcomes for target species as well as assets (e.g. threatened species and agriculture), including by monitoring a non-treatment area as a control;
 - c. investigate and aim to address human behaviours that may be creating or contributing to negative outcomes associated with invasive species (for example, by encouraging responsible pet ownership principles, including microchipping, desexing and suitable containment);¹¹
 - d. invest in the development and implementation of more sophisticated, non-lethal control methods, aimed at delivering long-term outcomes. In developing new methods, consideration should be given to minimising unintended impacts on non-target species. In particular, the Commission is encouraged to consider research into developing forms of reproductive control that are cost effective and suitable for widespread propagation; and
 - e. consider the impact of environmental settings on the suitability of various management methods. That is, whether certain management methods may be effective (or ineffective) in certain settings, but not in others. By way of example, the Sub-Committee cites successful studies of non-lethal measures focused on neutering existing populations of feral cats in certain urban settings, in circumstances where such approaches are historically not preferred by the responsible Department or Council.¹²
10. A key barrier to the effective management of invasive species (the approach to and outcomes of which are addressed earlier in this submission) is the lack of research into and application of, alternative non-lethal methods of control. The Sub-Committee submits that there is a strong need to investigate such alternatives in light of the serious limitations of lethal methods, which are outlined above.

¹¹ 'AVA Management of cats in Australia', *Australian Veterinary Association* (Web Page, 15 July 2022) <<https://www.ava.com.au/policy-advocacy/policies/companion-animals-management-and-welfare/management-of-cats-in-australia/>>.

¹² Rand, Lancaster, Inwood, Cluderay and Marston, 'L. Strategies to Reduce the Euthanasia of Impounded Dogs and Cats Used by Councils in Victoria, Australia' *Animals* (2018, 8, 100) <<https://doi.org/10.3390/ani8070100>>.

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

11. The Sub-Committee submits that concerted exploration, research, and implementation of humane, non-lethal invasive species management methods present valuable opportunities to improve the outcomes of invasive species management in the future. This should be carried out through a collaborative, integrated approach that actively involves the community to enhance outcomes.

Concluding Comments

NSW Young Lawyers and the Sub-Committee thank you for the opportunity to make this submission. If you have any queries or require further submissions please contact the undersigned at your convenience.

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