

**Submission
No 14**

INQUIRY INTO MANAGEMENT OF CAT POPULATIONS IN NEW SOUTH WALES

Organisation: Biodiversity Council

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**Biodiversity
Council**

Submission to the inquiry into the 'Management of cat populations in New South Wales'

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About The Biodiversity Council

The Biodiversity Council brings together leading experts including Indigenous knowledge holders to promote evidence-based solutions to Australia's biodiversity crisis. The Council was founded by 11 universities with the support of Australian philanthropists.



Contents

Introduction	4
Summary of recommendations	6
Prior reviews and public appetite for introducing cat containment policies	8
<i>Findings from prior state reviews regarding cat containment</i>	8
2024 NSW Natural Resources Commission Invasive Species Management Review	8
2016 NSW Natural Resources Commission State-wide Review of Pest Management.....	8
2012 NSW Companion Animals Taskforce report.....	8
<i>Social impetus to enforce pet cat containment policies</i>	9
Response to Terms of Reference	10
<i>(a) Impact of cats on threatened native animals in metro and regional settings</i>	10
Prevalence of free-roaming pet cats Australia-wide.....	10
Prevalence of free-roaming pet cats in NSW.....	10
Number of owners that allow their cats to roam.....	10
Prevalence of pet cats in natural areas	11
Example 1: Pet cats within the World Heritage-listed Blue Mountains	11
Example 2: Regular cat incursions into threatened species habitat near Manly	12
Percentage of roaming cats that hunt	13
Predation rates.....	13
Types of prey in urban areas	14
Threatened species and NSW wildlife rescue data	14
Evidence of biodiversity impacts.....	15
Case study: Reduced bird biodiversity in Sydney bushland trafficked by cats	15
Impacts of predation by pet cats on local wildlife populations	16
Case study 1: mortality in radio-tracked ringtail possums in Manly Dam Reserve	16
Case study 2: population-level impacts of urban cats on endangered bandicoots.....	16
‘Invisible’ impacts: extent of roaming and killing.....	16
‘Invisible’ impacts: disturbance	17
‘Invisible’ impacts: disease.....	18
Summary	18
<i>(b) The effectiveness of cat containment policies including potential barriers</i>	19
Encouraging responsible pet ownership through cat containment policies.....	19
Holistically addressing cat containment through policies, education, & support.....	19

Overcoming potential barriers	20
Juggling local government priorities	20
Juggling community attitudes and capabilities	20
(c) <i>Welfare outcomes for cats under contained conditions</i>	22
Contained pet cats and animal welfare	22
Defining animal welfare and a cat’s needs	22
Opportunities to positively influence cat welfare through containment	23
Potential negative implications of containment on cat welfare	23
Roaming pet cats and animal welfare	24
Correcting misconceptions about cats	25
(d) <i>Effectiveness of education programs and responsible pet ownership initiatives</i>	26
(e) <i>Implications for local councils in implementing cat containment policies</i>	27
Acknowledging the unique needs of individual councils	27
(f) <i>The effectiveness & benefits to implementing large scale cat desexing programs</i>	29
(g) <i>The impact of potential cat containment measures on the pound system</i>	30
(h) <i>The outcomes of similar policies on cat containment in other state or territories</i>	31
National overview of cat containment legislation and policies	31
Outcomes of cat containment in other Australian states and territories	32
Case study 1: Effective implementation of cat containment on Bruny Island, TAS ...	32
Case study 2: Lessons from 24/7 cat containment in Queensland	32
Case study 3: Successful cat prohibition in Halls Gap, Victoria	33
Case study 4: Observations of differing cat policies in Tweed Shire Council, NSW .	33
(i) <i>Options for reducing the feral cat population</i>	34
(j) <i>Any other related matters</i>	35
Legal obligations to reduce the impact of feral and pet cats on wildlife	35
Federal law	35
State laws	35
International obligations	35
Background: Existing powers available to NSW councils to manage roaming pet cats .	36
References	37

Introduction

The Biodiversity Council appreciates the timely inquiry into the management of cat populations in New South Wales, with a specific focus on pet cat containment; cat containment is one of the easiest ways to alleviate wildlife from predation pressure.

The Biodiversity Council is uniquely placed to speak with authority on this issue as our councillors include Professor [John Woinarski](#) ([Charles Darwin University](#), H-index 47) and Professor [Sarah Legge](#) (Australian National University, H-index 46) who are leading experts on the impact and management of pet and feral cats. They are among Australia's most renowned ecological scientists; their works have been cited in other scientific research papers a total of over 13,000 times. Over the past 15 years, Professors Woinarski and Legge have led major research projects on the impact and management of pet and feral cats in Australia, including leading a major research program funded by the Australian Government's National Environmental Science Program. As well as personally undertaking and overseeing primary and field-based research, they have synthesised the findings of more than one hundred studies related to this topic and produced a definitive book, *Cats in Australia, Companion and Killer* published by CSIRO Publishing.

Australian governments frequently call on professors Legge and Woinarski to provide guidance regarding the impact and management of cats, including being engaged by the Australian Government to draft the national Threat Abatement Plan (TAP) for predation by feral cats, which also considers pet cats as feral and pet cat populations are interlinked with cats moving between the two.

Cat management has reached a critical intervention point as cat ownership in Australia is at an all-time high. Around one third of households have a pet cat, totalling 5.3 million pet cats across Australia¹. Cats – pet and otherwise – have devastated Australia's biodiversity and continue to have major impacts. The most significant impacts of pet cats occur when cat owners allow their cats to roam, which leads to the hunting and killing of wildlife. In New South Wales, at least 35-52% of owners allow their cats to roam^{2,3}, noting, this level can vary greatly across jurisdictions. Cats also compete with native species for resources and are vectors for pathogens that cause disease in native species, livestock and people, costing the Australian economy \$6 billion per year⁴.

There is a growing culture of cat owners that care for their cat in a way that limits harm to wildlife, however, increased investment is needed to make cat containment the norm. New South Wales is one of the only states yet to introduce a legal framework for cat containment. It is the Biodiversity Council's view that legislation is needed to set the foundational

¹ Animal Medicines Australia 2022, [Pets in Australia: A national survey of pets and people](#).

² IPSOS 2019, *Cat containment survey*, data provided via Cat Protection Society of New South Wales.

³ Ma, GC & McLeod, LJ 2023, '[Understanding the factors influencing cat containment: identifying opportunities for behaviour change](#)', *Animals*, v. 13, no. 10.

⁴ Legge *et al.* 2020, '[Cat-dependent diseases cost Australia AU\\$6 billion per year through impacts on human health and livestock production](#)', *Wildlife Research*, vol. 47, no. 8, pp. 731-746.

expectation for cat owners, accompanied by other behaviour change strategies that utilise education, awareness and incentivisation.

Below we outline support for cat containment policies, directly address all terms of reference, and detail 12 recommendations that focus on improving biodiversity outcomes through better cat management.

In built environments, wildlife are under pressure from compounding threats, including: removal of vegetation and natural habitats, vehicle strikes, pollution of water, and predation by introduced species. Removing the threat of roaming pet cats is one of the easiest and most effective actions individuals can take to alleviate pressure on wildlife. Evidence indicates free-roaming pet cats in New South Wales predate upon at least 190 different native species and pose a risk to threatened species in natural areas. To effectively conserve wildlife in urban and regional settings, a range of strategies are needed to reduce the number of free-roaming pet cats.

Summary of recommendations

Recommendation 1: Develop a clear legal pathway within the NSW *Companion Animals Act 1998* to enable councils to introduce cat containment policies relevant to their local government area, as recommended by prior NSW Government Reviews and supported by the NSW general public. This should be done without delay, while other state-wide initiatives are considered.

Recommendation 2: Ensure that a practical policy approach is taken that allows enough flexibility to meet the specific needs of local areas and their communities, including phase-in periods.

Recommendation 3: Allocate long term multi-year funding to support local governments to enforce compliance with the *Companion Animals Act 1998* and any cat containment policies. Local governments should be eligible for funding to support the employment of staff to establish and implement cat containment policies and associated implementation activities, such as advertising and providing subsidies and support to community members.

Recommendation 4: Develop and disseminate a standardised companion animal management guidance package for local governments. The NSW Government should encourage all councils to adopt these. The package should include:

- Companion animal management plan template,
- An exemplary cat containment policy that councils can adopt or amend as needed,
- Guidance and format councils can follow to undertake community consultation, and
- A messaging and communication guide.

Recommendation 5: Fund a state-wide campaign for responsible pet ownership, including a state-wide web resource for responsible pet ownership. Content should help pet owners understand how to meet the welfare needs of their animal. Where available, existing materials from previous projects should be recycled and promoted, rather than re-inventing the wheel.

Recommendation 6: Allocate funding to extend the ‘Keeping cats safe at home’ program beyond 2024 and expand the program to additional councils.

Recommendation 7: Continue to fund social and ecological research to monitor changes in cat-owner behaviour and levels of free-roaming cats over time to guide and track progress towards cat containment goals.

Recommendation 8: Encourage local governments to develop and implement companion animal management plans that address objectives, strategies, monitoring and evaluation, to help drive continuous review and improvement of cat management.

Recommendation 9: Provide ongoing funding for councils to undertake large-scale desexing, microchipping and registration programs, and fund effective education programs to encourage people to keep cats indoors. Continue to disallow trap neuter release programs which do not reduce the impacts cats have on wildlife.

Recommendation 10: In conjunction with cat containment policies, investigate and implement strategies to reduce the key pressures on the pound systems (i.e. unowned cats).

Recommendation 11: Review state actions and obligations identified in the national feral cat threat abatement plan and use this as guidance to manage feral cats in NSW.

Recommendation 12: Develop and resource a state-wide cat management strategy that clearly articulates a vision and goals to achieve positive outcomes for cats, other animals, people and the environment. The plan should define, identify and address strategies for managing pet, feral and other cats.

Prior reviews and public appetite for introducing cat containment policies

Findings from prior state reviews regarding cat containment

Previous reviews conducted by the NSW Government have identified a need, and public support for, cat containment policies:

2024 NSW Natural Resources Commission Invasive Species Management Review

The 2024 NSW Invasive Species Management Review by the Natural Resources Commission recommended that the NSW Government ‘*Amend the Companion Animals Act 1998 to enable councils to introduce cat containment policies in their local government area*’⁵. The review found that ‘*Despite the risks that cats pose to conservation, production and human health, their status as a companion animal complicates their management and the Companion Animals Act 1998 is ineffective at managing these biosecurity risks. In comparison to other Australian jurisdictions, NSW legislation is more permissive and allows almost unrestricted access of cats to the outdoors.*’

2016 NSW Natural Resources Commission State-wide Review of Pest Management

The 2016 NSW State-wide Review of Pest Animal Management Review by the Natural Resources Commission recommended that the NSW Government ‘*Revise the current regulatory arrangements to make the declaration and enforcement of cat containment areas by local government more effective*’⁶.

2012 NSW Companion Animals Taskforce report

In 2011 the NSW Government established the Companion Animals Taskforce to inquire into key companion animal issues⁷. Over 1,400 public submissions were received in response to a discussion paper on cat and dog issues. The final 2012 NSW Companion Animals Taskforce Report recommended that ‘*comprehensive education material about the importance of confining cats to their owner’s property should be developed*’, including ‘*providing funding to councils to implement cat management programs as part of a grant funding program*’. The report also found that ‘*the confinement of cats, particularly at night, is considered to be central to responsible cat ownership as it can reduce the number of unwanted litters of kittens and the impacts of cats on wildlife and social amenity.*’ The report suggested ‘*consideration could be given to amending the Companion Animals Act to provide councils with options to impose local orders on cat owners to confine their cats, where this*

⁵ NSW Natural Resources Commission 2024, Recommendation 10 in [Reducing risk, securing the future – NSW Invasive Species Management Review](#), Sydney.

⁶ NSW Natural Resources Commission 2016, Recommendation 21 iv in [State-wide review of pest animal management](#), Sydney.

⁷ NSW Companion Animals Taskforce 2012, [NSW Companion Animals Taskforce report](#).

approach is considered appropriate and enforceable' (noting, the report advised against a statewide law due to different council needs and resources).

Social impetus to enforce pet cat containment policies

The 2012 NSW Companion Animals Taskforce asked the public '*do you support providing councils with voluntary powers to issue local orders to cat owners to confine their cats (where appropriate and enforceable)?*' Of 1,185 respondents, over 71% (n = 850) said 'yes,' with 16% responding 'no' (n = 185) and 13% 'unsure' (n = 148)⁷. This demonstrates strong public support for cat containment policies in New South Wales.

In the past decade, research and government consultation has found similar public support for cat containment policies in New South Wales:

- 63% of NSW respondents (n = 693 out of 1,101) said they support policies to 'require cat owners to keep their cat contained to their property', in research undertaken by Monash University⁸ while only a small minority (8%) opposed, with the remainder (26%) were ambivalent, selecting "neither support nor oppose."
- 82% of respondents (n = 241 out of 293) said they would support 'council lobbying the NSW state government to strengthen the cat management regulations available under the Companion Animals Act to give council increased regulatory powers to manage cats e.g. the ability to detain and fine cats straying beyond their owner's property boundaries' in a local survey undertaken by Blue Mountains City Council⁹.

As evidenced above, policies that require pet cats to be contained have strong support in New South Wales. There is growing consciousness amongst the Australian community that keeping cats contained is the safest approach for wildlife, as well as the cats themselves. The New South Wales Government should introduce policies that allow councils to govern cat containment in order to reflect a public need.

Recommendation 1: Develop a clear legal pathway within the NSW *Companion Animals Act 1998* to enable councils to introduce cat containment policies relevant to their local government area, as recommended by prior NSW Government Reviews and supported by the NSW general public.

⁸ BehaviourWorks Australia 2024, [Biodiversity Concerns Report](#), subset of NSW data provided

⁹ Blue Mountains City Council 2011, *Companion animal and wildlife protection survey*, Blue Mountains.

Response to Terms of Reference

(a) Impact of cats on threatened native animals in metro and regional settings

Pet cats, despite their valued role as companion animals, are a major threat to wildlife. Cats that are kept contained 24 hours per day (indoors or in a secure backyard enclosure) can safely co-exist with wildlife. It is only when owners allow their cats to freely roam that cats become a threat to other animals. Therefore, to understand the impact that pet cats have on threatened native animals in metropolitan and regional NSW, it is necessary to understand how many people allow their cats to roam. Below we detail the prevalence of roaming pet cats in NSW, the hunting behaviour of free-roaming pet cats and relevant case studies.

Prevalence of free-roaming pet cats Australia-wide

Evidence from multiple reputable sources suggests that a large proportion of Australian cat owners allow their pet/s to freely roam. One study estimated an average of 71.1% of pet cats are allowed to roam, based on six Australian studies¹⁰. In a survey of 356 Tasmanian residents 67% of respondents indicated they allowed their cats to roam, all or some of the time¹¹. Other studies have arrived at similar figures; a survey of Canberra residents found 57% allowed their cats to roam¹². Similarly, in a survey of 12,010 cat owners representing 23,920 cats, 51.8% of respondents (n = 6227) said they allowed their cats to freely roam¹³. The percentage of owners that allow their cats to freely roam is alarming given the large number of pet cats in Australia, and the high density of pet cats across Australia's urban areas. Around one third of households currently have a pet cat and pet cats occur at densities of 50-100 cats per square kilometre¹⁰. Animal Medicines Australia commissions research every few years to track pet ownership trends¹. The most recent survey estimated that there were 5.3 million pet cats across Australia (which was a 35% increase over two years). The growing number of pet cats in Australia creates additional risks for native wildlife, unless roaming behaviour is curbed.

Prevalence of free-roaming pet cats in NSW

Number of owners that allow their cats to roam

Data suggests that at least 35-51.9% of cat owners in NSW allow their cat/s to roam. In an independent survey, commissioned by the Cat Protection Society of NSW², 50.9% of 390 respondents indicated they allowed their cats to roam, all or some of the time. Research undertaken for RSPCA NSW surveyed 4482 NSW residents, where 35% (n = 1586) indicated they did not contain their cat, while 65% (n = 2896) indicated they fully contain their cat¹⁴.

¹⁰ Legge, S *et al.* 2020, '[We need to worry about Bella and Charlie: The impacts of pet cats on Australian wildlife](#)', *Wildlife Research*, vol. 47, no. 8, pp. 523-539.

¹¹ McLeod, L, Hine, D & Bengsen, A, 2015 '[Born to roam? Surveying cat owners in Tasmania, Australia, to identify the drivers and barriers to cat containment](#)', *Preventative Veterinary Medicine*, vol. 122, no. 3, pp. 339-344.

¹² ACT Government 2011 in Eyles & Mulvaney 2014, '[Responsible pet ownership and the protection of wildlife: options for improving the management of cats in the ACT](#)', viewed 14 November 2024.

¹³ Lawson, GT *et al.* 2019, '[The environmental needs of many Australian pet cats are not being met](#)', *Journal of Feline Medicine and Surgery*, vol. 22, no. 10, pp. 898-906.

¹⁴ Ma, GC & McLeod, LJ 2023, '[Understanding the factors influencing cat containment: identifying opportunities for behaviour change](#)', *Animals*, vol. 13, no. 1530.

We note, this figure is generally lower than other surveys and the authors acknowledge that ‘the study might have overestimated the proportion of people fully containing cats in the general population’ as ‘the online survey sample was not randomly selected and hence likely experienced some sampling bias in favour of people already containing their cats’ (i.e. the survey was promoted via outlets such as RSPCA NSW’s Facebook page and it is possible the audience of such forums are people with an interest in practising responsible pet ownership).

Prevalence of pet cats in natural areas

Two recent studies from NSW provide empirical evidence of the prevalence of roaming pet cats in suburban areas and threatened species habitat.

Example 1: Pet cats within the World Heritage-listed Blue Mountains

The townships of the Blue Mountains local government area (LGA) are nestled within a world-heritage listed national park. Around 74% of the Blue Mountains is National Park and 455 different native species have been recorded within the LGA, including 51 threatened species¹⁵. In 2022 researchers from RSPCA NSW and the University of New England looked closely at roaming cat populations in the Blue Mountains¹⁶. They set up wildlife cameras for two consecutive months on 50 different residential properties. Cats triggered the cameras 1,289 unique times and occurred at 76% of survey sites. Cats were observed at all hours of the day, particularly around 9.30am and 8.00pm. A range of wildlife were also observed during times when cats were also active, including bandicoots and possums. The researchers also drove 80 km of transect surveys to estimate the cat population using the standardised distance sampling approach. They observed 178 roaming cats on drives. The density of cats was estimated to be 0.21 cats/ha, producing an overall estimated abundance of 361 free-roaming cats across the Blue Mountains’ residential area of 1604 hectares.



A native feathertail glider in care after being rescued from the mouth of a pet cat in Bullaburra, Blue Mountains NSW. Image: Julia McConnell in Bullaburra, Blue Mountains

¹⁵ Applied Ecology 2019, [Blue Mountains Fauna Inventory](#), viewed 14 November 2024.

¹⁶ Davey IJK *et al.* 2023, ‘[Spatial and temporal movements of free-roaming cats and wildlife in two local government areas in Greater Sydney, Australia](#)’, *Animals*, vol. 13, no. 10.

Example 2: Regular cat incursions into threatened species habitat near Manly

Manly headland is part of the Northern Beaches local government area and includes residential areas, Sydney Harbour National Park and North Head Wildlife Sanctuary. The area is home to at least 130 native fauna species¹⁷. Three small mammal species - the bush rat, eastern pygmy possum and brown antechinus – were once locally extinct, but have been recently reintroduced through conservation programs. The headland is also home to a population of endangered long-nosed bandicoots (in NSW) and NSW’s only breeding sites for the endangered little penguin. Cats are prohibited in the National Park and North Head Sanctuary. In 2023 researchers deployed a network of 19 motion-sensore cameras for 56 days to understand cat activity in these areas¹⁸. The study found that cats frequently visited the protected areas. Five individual cats were detected in protected wildlife areas – including two cats wearing collars – and an additional six cats frequented surrounding residential and parkland areas. Rabbits, foxes and domestic dogs were also detected in the protected areas. Peaks in cat activity were recorded around dusk and early morning, overlapping with the activity of native animals known to be vulnerable to cat predation.



Predation by pet cats and foxes are a major risk to the endangered population of little penguins at North Head near Manly. In 2019 a pet cat was observed frequently prowling an area where two penguins were killed¹, and in 2015 a fox successfully killed 26 penguins before being shot. Left: Cat caught on camera trap near penguin habitat in Sydney Harbour National Park. Image: NSW National Parks and Wildlife Service. Right: Little penguins in Sydney. Image: [isf3017035](https://www.flickr.com/photos/istockphoto/3017035/). CC BY-NC.

¹⁷ NSW National Parks and Wildlife Service 2012, [Sydney Harbour National Park Plan of Management](#), viewed 14 November 2024,

¹⁸ Kennedy, BPA, Clemann, A & Ma GC, [Feline encounters down under: investigating the activity of cats and native wildlife at Sydney's North Head](#), *Animals*, vol. 14, no. 2485

Percentage of roaming cats that hunt

Cats are opportunistic hunters and most pet cats that are allowed to freely roam do hunt. It is estimated that 78.4% of pet cats allowed to roam will hunt. This statistic is based on 10 Australian studies, where pet cats brought prey back to their owner's house. Across an additional set of 19 studies from other countries, this figure was 75.1%, increasing confidence in the Australian estimate. The authors note that¹⁴ their figures are likely an underestimate as some pet cats hunt (and kill) without bringing prey back to the household. For example, a New Zealand study attached video cameras to the collars of 37 cats to better understand hunting and risk behaviours¹⁹. Despite capturing video evidence of 40 successful hunts, the researchers found 'no prey items were taken back to a cat's residence, indicating that predation information based exclusively on the prey items a cat takes home may greatly underestimate the amount of prey items captured by owned cats'. It is estimated that on average, only 15.1% of prey items killed by roaming pet cats are brought home by those cats¹⁴.

Predation rates

On average, it is estimated that over a year a free-roaming, hunting pet cat in Australia kills 186 animals – or, around three animals each week¹⁰. This number includes 110 native animals (40 reptiles, 38 birds and 32 mammals). About one third of the animals killed in urban areas are introduced species like rabbits, house mice, and house sparrows. Collectively, it is estimated that roaming pet cats kill 546 million animals per year in Australia. As such the management of pet cats has major implications for Australia's wildlife and ecosystems. These figures were produced by researchers using data from 66 peer-reviewed papers. The authors acknowledge that pet cats also prey upon invertebrates and frogs, however, not enough data are available to estimate how these animal groups are affected.



Native prey items returned by one free-roaming pet cat (female, desexed) over a three week period. Five animals were presented dead or remains were found: eastern rosella, juvenile red-bellied black snake, yellow-footed antechinus, bell miner and an eastern stony creek frog. Also returned was a juvenile blue-tongue lizard, and an eastern stony creek frog with a severe leg injury that would make it unfit to survive in the wild. Images: NSW cat owner.

¹⁹ Bruce, *et al.* 2019, '[Predation and risk behaviours of free-roaming owned cats in Auckland, New Zealand via the use of animal-borne cameras](#)', *Frontiers in Veterinary Science*, vol. 6.

Types of prey in urban areas

Cats kill a broad range of native birds, reptiles, mammals, amphibians and invertebrates, even in built-up areas. Multiple studies have cooperated with pet owners to examine the diet of pet cats. For example, cat owners from a study in a highly developed area of eastern Sydney (in the Bondi to Paddington vicinity) reported their cats bringing home: native birds (e.g. superb fairy wren and eastern yellow robin), native skinks (e.g. eastern water skink, southern weasel skink), ringtail possums, invertebrates (e.g. stick insects and large scolopendrid centipedes) and even two species of snake (the golden crowned snake and a juvenile green tree snake)²⁰.

Threatened species and NSW wildlife rescue data

In the 2022/23 financial year, 1,940 injured wildlife entered the NSW wildlife rescue system due to cat attacks²¹. These rescues account for 2% of all wildlife rescued during the 2022/23 financial year. The fate of 70% (n = 1,389) of these animals was death. We note that the proportion of cat attacks represented in the wildlife data cannot be used to represent the scale of death and injury inflicted by cats. Most of the time cats will kill their prey and not bring it home (or return prey that is already dead or beyond rescue)¹⁰, so the scale of killing is underrepresented in the wildlife rescue data. However, the data provides some insights into species vulnerable to cat predation.

During the 2022/23 financial year, 190 different native species were brought to rescue shelters as a result of cat attacks, and 18 of these species were classified as threatened. The most frequently reported species were: rainbow lorikeet, common ringtail possum, eastern blue-tongue lizard, noisy miner and the crested pigeon. The 19 threatened species brought to wildlife rescues because of attacks by pet cats in the 2022/23 financial year were: squirrel glider, eastern long-eared bat, southern myotis, large-eared pied bat, Corben's long-eared bat, large bent-winged bat, little bent-winged bat, grey-headed flying-fox, common blossom-bat, eastern pygmy-possum, brush-tailed phascogale, koala, eastern coastal free-tailed bat, rose-crowned fruit dove, wompoo fruit-dove, bush-stone curlew, barred cuckoo shrike and powerful owl.



The squirrel glider, wompoo fruit dove, eastern pygmy possum and southern myotis are among the threatened species hunted by pet cats in NSW. Contrary to perceptions that urban areas are largely concrete, human environments – cities and towns are ecologically important and provide critical habitat for species. At least 46% of nationally-listed threatened animal species are found in urban areas. Images by (left to right): Jane G, Juliegraham173, Mobby & Reiner Richter, CC BY-NC.

²⁰ Dickman, CR & Newsome, TM 2015, '[Individual hunting behaviour and prey specialisation in the house cat *Felis catus*: implications for conservation and management](#)', *Applied Animal Behaviour Science*, vol. 173.

²¹ NSW Government 2023, '[Wildlife rehabilitation data dashboard](#)', viewed 15 November 2024.

Evidence of biodiversity impacts

Available case studies indicate that pet and other urban cats living in urban environments can significantly affect biodiversity. While predation rates of pet cats are well understood, understanding how cats influence populations and biodiversity in urban areas is more complex due to the intrinsic nature of the issue, i.e. pet cats interact with wildlife in highly modified landscapes, where multiple factors are acting on wildlife. Ecological interactions are complex and research needs to be interpreted with care. Several studies have tried to look for correlations between cat density and wildlife abundance but have produced inconsistent results, or are hard to interpret due to the extensive range of variables: many factors influence the composition of urban wildlife communities, and teasing apart the sole influence of roaming cats on those urban wildlife communities is challenging and requires an experimental design with adequate statistical power and replication across sampled areas that are environmentally similar but have marked contrasts in density of roaming pet cats¹⁰. To date, such robust studies have not been conducted, and little inference can be drawn from the few studies to date that have attempted to relate characteristics of urban wildlife communities to densities of roaming cats.

Case study: Reduced bird biodiversity in Sydney bushland trafficked by cats

Researchers from the University of Sydney investigated the intensity of predation on bird nests in forest patches through Sydney²². Scientists set up 462 artificial nests at 24 field sites and collected results on predation of artificial eggs after 15 days. Over 70% (n = 326) nests had been preyed upon. The main predators of nests were identified as birds and black rats, and there were instances of predation by ringtail possums and brown antechinus. In a second part of the study, scientists recorded relative levels of cat activity in each area²³. The study reported that higher levels of cat activity were associated with less nest predation by predators such as the introduced black rat (presumably due to suppressive effects of cats on these nest predators, as faecal analysis showed cats preyed upon black rats). While this finding alone might suggest positive implications of free-roaming cats - the researchers simultaneously found that high cat activity was associated with reduced avian richness presumably due to direct predation by cats; at sites with high cat activity, there were fewer bird species and an absence of vulnerable, small bird species that feed or nest close to the ground. This case study demonstrates how cats may shift the natural diversity of species in an area and the complexity of interpreting ecological studies.

²² Matthews, A *et al.* 1999, '[The influence of fragment size and edge on nest predation in urban bushland](#)', *Ecography*, vol. 22, pp. 349-356.

²³ Dickman, CR, '[House cats as predators in the Australian environment: impacts and management](#)', *Human-Wildlife Conflicts*, vol. 3, no. 1, pp. 41-48.

Impacts of predation by pet cats on local wildlife populations

There are documented cases of cats near urban areas being a major cause of mortality in wildlife.

Case study 1: mortality in radio-tracked ringtail possums in Manly Dam Reserve

Between 1994 and 1999 researchers attached radio-collars to track the survivorship of 79 ringtail possums in Manly Dam War Memorial Reserve, Sydney²⁴. Once tagged, ringtail possums were tracked until their end of life or study conclusion, whichever came sooner. 76% (N = 60) of possums were killed during the study period. Tracked possums survived an average of 319 days, with survivorship ranging from 22 days to 1196 days. Predation by foxes and cats was the cause of 80% of deaths, with foxes and cats killing 47% and 33% of ringtail possums, respectively. Vehicle strikes were responsible for 15% of deaths.

Case study 2: population-level impacts of urban cats on endangered bandicoots

A long-term study on the last wild population of endangered eastern barred bandicoots (*Perameles gunnii*) at Hamilton municipal tip, Victoria, found that cats were responsible for 18% of documented mortalities between 1980 and 1990 and that cats particularly targeted their predation on juvenile and subadult bandicoots, which could adversely affect the recruitment of new individuals to the population and contribute to population decline²⁵. This species eventually became extinct in the wild in mainland Australia, but has slowly recovered after a long-term (30 year) captive breeding and reintroduction program, with those reintroductions occurring into fenced areas from which cats are excluded.

'Invisible' impacts: extent of roaming and killing

The impact cats have on the environment and native wildlife can easily be underestimated, or go unnoticed, as predatory behaviour can occur in “secret”. However, the use of modern technology – including GPS tracking collars and kitty-cam collars has helped unveil the extent of activity cats undertake.

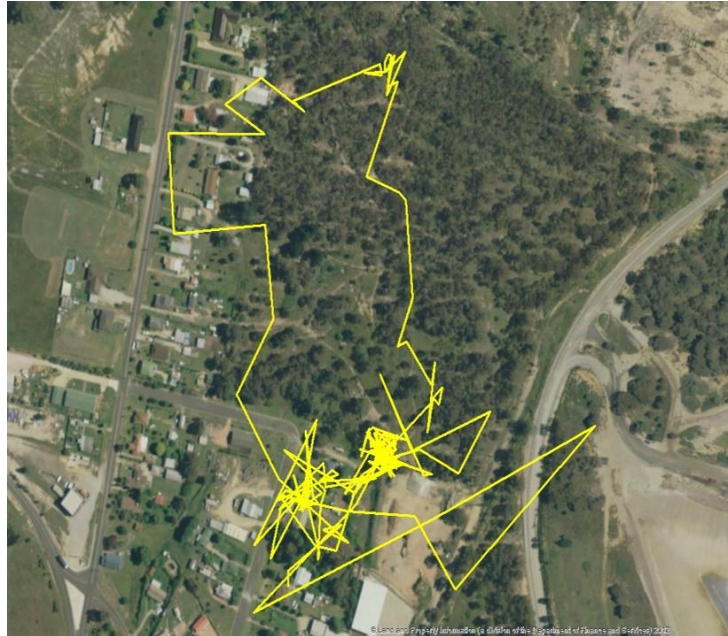
For example, studies using video cameras on cat collars show that cats bring a minority of their prey home, making it very easy for owners to underestimate how often their cat might kill. In the United States of America researchers attached cameras to the collars of 55 cats for 7-10 days and reviewed footage for hunting behaviour. In this study, only 23% of cat prey

²⁴ Smith *et al.* 2003, '[Radio-tracking studies of common ringtail possums, *Pseudocheirus peregrinus*, in Manly Dam Reserve, Sydney](#)', *Proceedings of the Linnean Society of New South Wales*, vol. 124, pp. 183-194.

²⁵ Dufty, AC 1994, '[Population demography of the eastern barred bandicoot \(*Perameles gunnii*\) at Hamilton, Victoria](#)', *Wildlife Research*, vol. 4, no. 21, 445– 457.

items were returned to households; 49% were left at the site of capture and 28% were consumed²⁶.

Studies using tracking collars have also shown that cats roam further than their owners may think. One Australian study attached GPS-tracking collars to cats for a week and found that 39% of pet cats (n = 69 out of 177) were out roaming when their owners thought they were at home²⁷.



Movements of a roaming pet cat fitted with a GPS tracking collar who ventures several blocks away from home through nearby bushland in Lithgow, NSW. Image: NSW Central Tablelands Local Land Services.

'Invisible' impacts: disturbance

In addition to direct predation, free-roaming pet cats can negatively affect the welfare of wildlife by causing fear and stress. Evidence suggests native wildlife alter their behaviour in response to the presence of cats²⁸. For example, in Mandurah, Western Australia, one free-roaming unregistered, desexed male cat caused the total collapse of a protected breeding colony of threatened fairy terns²⁹. In a period of three weeks, six adults and multiple chicks were directly killed by the cat. Regular disturbance by the cat caused the remaining birds to abandon all 111 nests in the colony. The presence of the cat meant the bird colony failed to produce a single chick that made it to the end of nesting season. This case study demonstrates how even a small number of cats can have detrimental effects on sensitive species.

²⁶ Loyd *et al.* 2012, '[Quantifying free-roaming domestic cat predation using animal-borne video cameras](#)', *Biological Conservation*, vol. 160, pp. 183-189.

²⁷ Roetman *et al.* 2017, '[Cat tracker South Australia: understanding pet cats through citizen science](#)', Discovery Circle Initiative, University of South Australia, Adelaide.

²⁸ Fardell, L. *et al.* 2023, '[Influences of roaming domestic cats on wildlife activity in patchy urban environments](#)', *Frontiers in Ecology and Evolution*, vol. 11.

²⁹ Greenwell *et al.* 2019, '[Cat gets its tern: a case study of predation on a threatened coastal seabird](#)', *Animals*, vol. 16, no. 9.

'Invisible' impacts: disease

An impact that pet cats have that is often overlooked is their role in the spread of toxoplasmosis and other cat-borne diseases. *Toxoplasma gondii* is a cat-dependent pathogen that is spread by microscopic oocysts released with cat faeces that contaminate soils and plants where they can be ingested by other warm-blooded mammals. Animals can also contract the pathogen by eating infected meat. The pathogen was introduced to Australia with the arrival of the cat. Toxoplasmosis can have major impacts on human health, reduce livestock production, and cause high rates of mortality in wildlife. Susceptible animals can experience difficulty breathing, convulsions, loss of coordination, weakened muscle movement, disorientation, blindness and miscarriage of young³⁰. Many marsupials are particularly susceptible to the disease and infected animals can die within days to weeks (sudden death has also been observed). Death resulting from toxoplasmosis has been observed in a range of marsupial species, including: koalas, wombats, wallabies, possums, bandicoots and bilbies. Toxoplasmosis is also a serious disease in cats that can require veterinary treatment. *Toxoplasma gondii* can also be transmitted to humans, where it can cause miscarriage in pregnant women or congenital defects in babies hospitalisation of healthy adults, and long-term and serious neurological impairment. In livestock, especially sheep, *Toxoplasma gondii* infections to pregnant ewes cause miscarriage; this causes substantial impacts to production and economic viability in some regions. the total economic costs to *Toxoplasma gondii* infections in people and livestock have been estimated at \$6 billion per year⁴.

Summary

In built environments, wildlife are under pressure from compounding threats, including: removal of vegetation and natural habitats, vehicle strikes, pollution of water, and predation by introduced species. Removing the threat of roaming pet cats is one of the easiest actions individuals, councils, communities and governments can take to alleviate pressure on wildlife. Evidence indicates free-roaming pet cats in New South Wales predate upon at least 190 different species and pose a risk to threatened species in natural areas²¹. To effectively conserve wildlife in urban and regional settings, a range of strategies are needed to reduce the number of roaming pet cats.

³⁰ Canfield, PJ *et al.* 1990, '[Lesions of toxoplasmosis in Australian marsupials](#)', *Journal of Comparative Pathology*, vol. 103, no. 2, pp. 159-167.

(b) The effectiveness of cat containment policies including potential barriers

Encouraging responsible pet ownership through cat containment policies

The most effective solution to prevent pet cats preying on native animals is for owners to keep them indoors and only provide controlled access to the outdoors via a cat run, cat-proof fencing, a harness and leash or similar. This is called cat containment (also sometimes referred to as a ‘24/7 curfew’). While there is an expected and accepted expectation that dogs are kept under their owners control at all times, either securely contained within an owners’ yard or leashed, the same legal and social precedent does not yet exist for cats in Australia. NSW is an outlier when it comes to cat containment policies. NSW and Western Australia are the only states that do not provide local governments a clear pathway for introducing cat curfews or containment. Over the last decade many local governments across Australia (particularly in Victoria, ACT, South Australia and on islands) have introduced pet cat containment requirements in response to the large and robust evidence-base demonstrating the impact of roaming pet cats on wildlife, and to rapidly growing community expectations that cat owners should minimise the impact of their pet on surrounding neighbours and wildlife.

An important distinction: wandering pet cats vs unowned cats

It is important to note upfront that **cat containment policies are a management tool specifically targeted at reducing wildlife impacts caused by roaming pet cats;** containment policies aim to shift human behaviour, so that more owners keep their cats indoors. As detailed above – a large percentage of Australians still allow their cats to roam, which contributes to a large number of free-roaming pet cats on our streets. Different management tools are required to manage cats that do not have owners.

Holistically addressing cat containment through policies, education, awareness & support

Examples of effective (and ineffective) approaches to cat containment policies are detailed in section (h). Rules are just the start. There are many drivers and barriers influencing whether or not a cat owner keeps their cat inside. For example, in the absence of cat containment rules, researchers found that NSW cat owner’s perceived capability to contain their cat highly influenced whether or not they voluntarily kept their cat contained¹⁴. While legislation will motivate some sectors of the cat-owning community to keep their cats indoors, legislation alone would be ineffective at solving the roaming cat problem. To be effective legislation changes must be supported by communication, education, enforcement, and improved access (and incentives, at times) to services. As has been observed with the introduction of other new laws, from compulsory seatbelts to water saving restrictions, considerable investment must be made in communicating new rules to the community, the reasons for them and then also monitoring and fining breaches. Without councils fining people who break the law, they send the signal that compliance with the law is optional. Community acceptance of new requirements is likely to be increased by councils providing support during a transition period. Such support could for example, include rebates for part of the costs associated with containing cats such as for flyscreens to stop cats slipping out of open windows.

Overcoming potential barriers

Juggling local government priorities

Local governments are responsible for enforcing the *Companion Animals Act 1998* (NSW). However, the effectiveness of such legislation is dependent upon adequate resourcing and commitment by responsible agencies to enforce regulations. The extent to which local governments can regulate pets is dictated by a limited budget, which is balanced across competing priorities. In 2020, Australian local governments were surveyed about their approaches to cat management; 139 councils reported their yearly expenditure on pet cat management³¹. Over 47% (n = 65) of councils spent less than \$20k per year on pet cat management, 18% spent \$20-50k, 22% spent more than \$50k and 13% indicated their local government spent nothing on pet cat management. The 2016 NRC review of pest management flagged that many submissions indicated ‘managing companion animals places a significant cost burden on local government, and called for the sustainable resourcing of existing and proposed activities’. Lack of resources remains a current issue for local governments. The 2022 draft report on ‘Rehoming Companion Animals in NSW’ commissioned by the NSW Officer of Local Government reported that NSW councils collectively spend an estimated \$43 million on dog and cat management per year, but collectively only receive around \$8 million from the state’s Companion Animal Fund annually³². Available budget and resources will be a major determinant of whether or not a council can effectively implement a cat containment policy. Some councils may not have available funds or interest in introducing cat containment policies, resulting in varying uptake of cat containment policies across jurisdictions. Therefore, bolstering state resources available for companion animal management would help increase the uptake and implementation of cat containment policies.

Juggling community attitudes and capabilities

Detailed NSW-based research is now available on factors that influence why owners do or don’t contain their cat. A survey of 4482 NSW cat owners found that “the most important influence for cat owners to keep their cats contained was having the skills, knowledge and belief that they could do so successfully. Those who lived in apartments, were renting or were motivated by their cat’s safety, to protect wildlife or to care for their community were also more likely to contain their cats.”¹⁴ When cat owners were asked why they allow their cat roam freely, the most frequently responses were beliefs that: it was okay for their cat to roam during the day just not at night, their cat did not roam very far from their property and that their cat wants to be outside and active. Using available data to develop interventions and campaigns that are tailored to address different segments of the cat-owning community will increase the responsiveness to cat containment policies.

³¹ Nou, T *et al.* 2021, [The management of cats by local governments of Australia](#), Threatened Species Recovery Hub viewed 18 November 2024.

³² Centre for International Economics 2022, [Draft report: Rehoming of companion animals in NSW](#), viewed 20 November 2020.

Recommendation 2: Ensure that a practical policy approach is taken that allows enough flexibility to meet the specific needs of local areas and their communities, including phase-in periods.

Recommendation 3: Allocate long term multi-year funding to support local governments to enforce compliance with the *Companion Animals Act 1998* and any cat containment policies. Local governments should be eligible for funding to support the employment of staff to establish and implement cat containment policies and associated implementation activities, such as advertising and providing subsidies and support to community members.

Recommendation 4: Develop and disseminate a standardised companion animal management guidance package for local governments. The NSW Government should encourage all councils to adopt these. The package should include:

- Companion animal management plan template,
- An exemplary cat containment policy that councils can adopt or amend as needed,
- Guidance and format councils can follow to undertake community consultation, and
- A messaging and communication guide.

(c) Welfare outcomes for cats under contained conditions

Whether cats are kept contained or allowed to roam freely, there are welfare risks and benefits associated with each way of keeping cats³³. Containment itself isn't a measure for good or bad welfare, rather, welfare is influenced by whether a cat's core needs are being met regardless of whether they are or aren't contained. Starting a discussion about cat containment (and responsible pet ownership) creates an opportunity to educate owners about meeting a cat's needs more generally.

Contained pet cats and animal welfare

Defining animal welfare and a cat's needs

RSPCA Australia³⁴ defines good animal welfare as follows:

“The welfare of an animal includes both physical and mental states. Ensuring good animal welfare goes beyond preventing pain, suffering or distress and minimising negative experiences, to ensuring animals can express their natural behaviour in an enriching environment, feel safe, have healthy positive experiences and a good quality of life. Thus providing good animal welfare means providing animals with all the necessary elements to ensure their physical and mental health and a sense of positive individual wellbeing.”

RSPCA Australia summarises a cat's core needs as choice and variety in six basic resources: resting and hiding places, food, water, toileting areas, places to scratch and opportunities to engage in play and normal behaviours. When cats are allowed to freely roam, some of these needs are met by the external environment. Keeping a cat contained places greater responsibility on an owner to ensure these needs are met in different ways.

Existing challenges of owners to meet their cat's welfare needs

Australian research has shown that many owners currently struggle to meet the range of welfare needs of their cat – regardless of whether or not it is contained. A survey of 12,010 Australian cat owners was conducted to identify whether cat owners were meeting their cats' environmental needs and identify areas of deficiency that could impact a cat's health and welfare. Overall, the study concluded that many pet cats were not having their physical and mental needs met³⁵. A key issue identified was the prevalence of urinary tract disorders which are associated with inadequate toileting facilities or can be related to diet. The authors found 'no significant relationship between the presence of urinary problems and whether the cat was house indoor, indoor-outdoor or outdoor', however, they did find increased urinary problems in multi-cat households, households with a low number of litter trays, those that used crystal-type litter and those that less frequently cleaned faeces from the litter tray. This

³³ RSPCA Australia 2023, [PPA08 Cat containment](#) viewed 14 November 2024.

³⁴ RSPCA Australia 2019, [What is good animal welfare](#), viewed 14 November 2024.

³⁵ Lawson, GT, Langford, DM & Harvey, AM, 'The environmental needs of many Australian pet cats are not being met', *Journal of Feline Medicine and Surgery*, vol. 22, no. 10, pp. 898-906.

study provides good background information about the existing challenges of owners to meet their cat's welfare needs. Opening a discussion with the community about cat containment creates an opportunity to re-educate owners about general animal welfare. Findings from this study could be used to identify which messages about cat husbandry should be emphasised when educating owners about cat containment.

Opportunities to positively influence cat welfare through containment

Whether or not containment will positively or negatively affect a cat's welfare is a complex discussion that is 1) dependent on the form of containment implemented (i.e. whether the cat is kept solely indoors or provided with controlled access to the outdoors), 2) intertwined with the broader context of whether, and how, a cat's core needs are being met, and 3) subject-dependent as each cat has individual preferences.

A common misconception is that roaming is important for the well-being of a cat. Researchers from the University of Adelaide decided to test whether "indoor" or "outdoor" cats experienced a higher quality of life. They found that 'exclusively indoor housing was significantly associated with both higher cat quality of life and higher cat-guardian relationships compared to cats with outdoor access'³⁶ (note: their definition of 'exclusively indoors' included cats that had controlled access to the outdoors via a leash or outdoor enclosure). This finding was based on data from 1,591 cat-owners that completed the Feline Quality of Life assessment; this assessment provides an overall estimate of an animal's welfare based on 16 questions related to healthy behaviours and clinical signs that act as indicators of a cat's physical and mental health³⁷. Results from this study suggest that containment may help improve a cat's quality of life by fostering a better relationship between the cat and owner; keeping a cat contained may naturally create more opportunity for positive cat-owner interactions and owners may become more observant of their cat's health and able to better respond to adverse changes.

Potential negative implications of containment on cat welfare

The impacts of a solely indoor lifestyle is considered an under-explored area of research. While there is some evidence that contained cats can have a higher quality of life, findings across studies can be highly variable and cats kept contained may be more or less prone to specific welfare outcomes. For example, if a cat's needs are not being met, it can surface as disease or behavioural issues. Common behaviours cats exhibit if they have a problem include spraying urine on house surfaces, defecating outside the litter tray and scratching furniture. One survey of 355 cat owners in France found that urination problems and anxiety were more frequent in indoor cats, but that there was no significant relationship between living conditions (indoors or outdoors) and indoor scratching, obesity and grooming disorders³⁸.

³⁶ Henning, J, Nielson, T, Fernandez, E & Hazel, S 2022, '[Cats just want to have fun: associations between play and welfare in domestic cats](#)', *Animal Welfare*, vol. 32.

³⁷ Tatlock, S, Gober, M, Williamson, N & Arbuckle R 2017, '[Development and preliminary psychometric evaluation of an owner-completed measure of feline quality of life](#)', *The Veterinary Journal*, vol. 228, pp. 22-32.

³⁸ Schubnel, E & Arpaillange, C 2008, '[Contribution to the study of indoor cats behavioural problems](#)', *Pratique médicale et chirurgicale de l'animal de compagnie*, vol. 43, no. 63-70.

A study by The University of Adelaide²⁷ surveyed 3,192 owners in South Australia with 4,314 pet cats about their cat's personality traits, including factors related to anxiety, skittishness, outgoingness, dominance, spontaneity and friendliness. They found that the personalities of indoor and outdoor cats were very similar. The only statistically significant difference found was that the indoor cats tended to be slightly more friendly than cats that spent time outside.

Two Australian studies on the risk factors associated with obesity in cats did not identify an 'indoor' lifestyle as a key influence (the highest risk factor is neutering and improper diet management). Data showed similar prevalence of obesity in 'indoor' or 'outdoor' cats, with an 'indoor' lifestyle slightly influencing obesity; a study from Perth observed obesity in 21.5% and 17.5% of predominantly inside and outside cats respectively³⁹, and a study from Sydney observed obesity in 14.8% and 17.5% of vet visits by 'indoor' and 'outdoor' cats, respectively⁴⁰.

Roaming pet cats and animal welfare

Equally relevant to the discussion about animal welfare, is the welfare implications for roaming cats. Roaming is a recognised high-risk behaviour for pet cats. Free-roaming behaviour is associated with a number of welfare concerns for pet cats⁴¹, including:

- Increased risk of infectious disease and parasite infestations,
- Increased risk of injury or death due to traffic accidents, attacks from other animals (e.g. dogs), fighting or ingestion of poisonous substances, and
- Increased chance of becoming lost, trapped, or impounded or euthanased by the local council.

Injury or death resulting from risk factors associated with an outdoor lifestyle are very common. In a study of 5,385 Victorian cat owners, 2 in 3 cat owners (66.3%) reported that they had lost at least one cat to a roaming-related incident⁴². Of the 66.3%, one third (34.1%) had lost a cat to a car accident and around one quarter (23.6%) reported that they had a cat that disappeared and never came home. Studies that have attached cameras to the collars of cats help provide further context to these alarming statistics. In one study, a cat was observed crossing the road 24 times over the seven-day recording period, which provides a sense of the frequency that roaming cats can engage in behaviours that risk their health and safety⁴³. Other risky behaviours observed from camera-collar and tracking studies include: drinking from unknown sources such as puddles in car parks and gutters, and venturing into

³⁹ Robertson, ID 1999, '[The influence of diet and other factors on owner-perceived obesity in privately owned cats from metropolitan Perth, Western Australia](#)', vol. 40, no. 2, pp. 75-85.

⁴⁰ Teng, KT, McGreevy, PD, Toribio, JA et al. 2017, '[Risk factors for underweight and overweight cats in metropolitan Sydney, Australia](#)', *Preventative Veterinary Medicine*, vol. 144, pp. 102-111.

⁴¹ Tan, SML, Stellato, AC and Niel, L 2020, '[Uncontrolled outdoor access for cats: an assessment of risks and benefits](#)', *Animals*, vol. 10, no 258.

⁴² Elliott, A, Howell TJ, McLeod, EM & Bennett PC 2019, '[Perception of responsible cat ownership behaviours among a convenience sample of Australians](#)', *Animals*, vol. 9, no. 703.

⁴³ Loyd *et al.* 2013, '[Risk behaviours exhibited by free-roaming cats in a suburban US town](#)', *Veterinary Record*, vol. 173, no. 12.

potentially-hazardous locations such as storm drains, roof tops, crawl spaces of houses, industrial garbage bins and busy carparks^{8, 13}.

We note that any discussion of cats and animal welfare should not restrict focus solely to cats. There are profound pain and welfare issues with the many wild animals that have been maimed by pet cats in hunting attempts, and with the manner in which cats repeatedly ‘play’ with wild animals they have captured but not yet killed.

Correcting misconceptions about cats

Historically, cats have been perceived as a low-maintenance pet. For example, Karingal Vet Hospital, Victoria promotes getting a cat because they are “less maintenance than dogs”, “do not need any formal training and are capable of entertaining themselves”⁴⁴. However, as detailed in evidence above, a majority of cats are not having their welfare needs met (regardless of whether or not they are contained). All cats deserve to have their welfare needs met and pet ownership should be considered a privilege, rather than a right. Strategies are required to 1) increase the value people place on cats and 2) help people consider the resources required (e.g. time, money, housing) to provide for an animal before getting a cat. Part of responsible pet ownership should include ensuring you can keep your cat contained. Cats that are kept contained are safer from disease and injury, and the upfront cost of containment avoids expensive bills from roaming-related injuries, or emotional distress from a roaming-related death. Education is needed to help people make informed decisions about their capability to provide for a pet’s lifetime, which, in the long term, can: help people make better decisions about getting a pet, improve welfare outcomes for all animals, and reduce the number of surrendered or abandoned animals.

Recommendation 5: Fund a state-wide campaign for responsible pet ownership, including a state-wide web resource for responsible pet ownership. Content should help pet owners understand how to meet the welfare needs of their animal. Where available, existing materials from previous projects should be recycled and promoted, rather than re-inventing the wheel.

⁴⁴ Karingal Vet Hospital 2024, [8 reasons why cats make great pets](#), viewed 20 November 2024.

(d) Effectiveness of community education programs and responsible pet ownership initiatives

‘Keeping cats safe at home’⁴⁵ is a four-year project funded by the NSW Environmental Trust to reduce the impacts of cats on wildlife. The project commenced in 2021 and concludes this year (2024). The project is being delivered by RSPCA NSW in partnership with 11 councils. In each council area, targeted behaviour change strategies are being used to encourage responsible cat ownership practices, such as containment. The project involves strategies such as: a social marketing campaign, education visits for schools, community engagement visits and up to \$90,000 per council in incentives such as fee or subsidised desexing. For example, Blue Mountains City Council used some of this funding to offer cat owners a \$400 subsidy towards a cat enclosure.

One thing that distinguishes ‘Keeping cats safe at home’ from other programs in Australia is the standard of social and ecological baseline data collected from the outset, to help guide the project and monitor changes over time. At the start of the project social research collected information from 7,854 NSW residents across the partner LGAs to understand existing attitudes and behaviours, and identify appropriate interventions. Likewise, ecological data was collected on wildlife and free-roaming cat populations. Repeating this work at intervals can be used to provide insights on how containment attitudes and practices, and levels of free-roaming cats change over time. While some of the initial baseline data has been published^{14,16,18}, follow-up work is not yet publicly available and RSPCA NSW would be best to address outcomes and learnings from their project. However, this project represents an ideal standard for tracking progress towards cat containment goals; information on containment behaviours before and after the introduction of laws (and other strategies) is lacking from other jurisdictions.

We note, that the initial social research undertaken as part of the project involved interviews with each of the partner councils. The limitations of the current NSW legislation was raised as a concern by councils, particularly around the ability to regulate roaming cats. Some councils expressed the desire to be able to enforce cat containment laws locally, as an additional management strategy in the toolkit. Councils also raised concerns about resourcing and staffing limitations.

Recommendation 6: Allocate funding to extend the ‘Keeping cats safe at home’ program beyond 2024 and expand the program to additional councils.

Recommendation 7: Continue to fund social and ecological research to monitor changes in cat-owner behaviour and levels of free-roaming cats over time to guide and track progress towards cat containment.

⁴⁵ RSPCA NSW n.d., [Keeping cats safe at home](#), viewed 22 November 2024.

(e) Implications for local councils in implementing and enforcing cat containment policies

Acknowledging the unique needs of individual councils

In 2020 a nation-wide survey asked councils “What would you like to implement in terms of cat management, if you had no limitations and the freedom, resources etc’. to do anything?” the most popular answer was ‘enforce pet cat containment’³¹.

RSPCA NSW CEO Steve Coleman succinctly summarised the need for cat containment laws when he expressed full support for Eurobodalla’s call to implement cat containment:

“Managing cats and their impacts is a major challenge in Australia. No one has the ultimate solution to deal with the various categories of cats. At least we can deal with the owned cat population and influence their outcomes, by way of cat curfews. An amendment to the NSW Companion Animals Act 1998, either to provide for a cat curfew, or give local councils the discretion to introduce a curfew, would help in encouraging responsible pet ownership.” Mr Coleman said cat containment and curfews should be considered in a local context, for example cats living near national parks and wildlife reserves posed a greater risk to wildlife compared to cats living in highly urbanised settings. He said a phase-in period should also be implemented to allow cats and owners time to adjust.⁴⁶

For over a decade NSW councils have been calling for powers to implement local cat curfews.⁴⁷ Over the past two years this call has grown stronger; during this time at least 18 individual councils have passed motions and written to the state government asking for amendments to the *Companion Animals Act 1998* so that councils can implement cat containment policies that meet their local needs. Local Government NSW (LGNSW) – the peak body that represents all 128 NSW councils - advocates for ‘amending legislation to enable local governments to enforce the containment of pet cats in NSW, supported by funding to support implementation and enforcement’⁴⁸. Each policy that appears in LGNSW policy platform is put forward by and voted on by councils.

There is a clear appetite by councils for cat containment policies – at a local level. Councils have expressed opposition to blanket laws, which could have unintended consequences for councils not equipped to manage such laws and ultimately lead to failed outcomes. For example, resources for managing pet cats greatly varies across jurisdictions depending on local priorities. Tweed Shire Council is one council that has prioritised cat management, and in 2017 successfully obtained funds to implement a three-year ‘Love cats, love wildlife’ program⁴⁹. The program involved an education campaign, community training and local wildlife monitoring. Thus, councils like Tweed Shire Council would be in a better position to successfully implement cat containment policies, than ones that have not yet implemented

⁴⁶ Eurobodalla Shire Council 2018, [Media release: push for cat curfew](#), 3 May, viewed 18 November 2024.

⁴⁷ Cronshaw, D 2013, [Call for cat curfew](#), Newcastle Herald, 20 November, viewed 18 November 2024.

⁴⁸ Local Government NSW 2024, [Policy platform](#), viewed 18 November 2024.

⁴⁹ Tweed Shire Council n.d., [Love cats love wildlife](#), viewed 18 November 2024.

any groundwork with the community. Allowing councils to locally introduce cat containment in the immediate-term, would allow councils that are ready, to begin championing cat containment policies in their communities while a statewide approach is deliberated further.

In an ideal scenario, cat containment would be required across all jurisdictions in NSW with enough resources made available by the state government to adequately introduce and enforce the laws. However, it may be unrealistic to jump to this goal in the short term. Introducing cat containment laws at a local level may be an important and necessary stepping stone to eventually achieve state-wide cat containment in NSW. Introducing laws at a local level would require councils to undertake a community consultation process, which is an important first step in introducing to the concept to the community and taking them on a behaviour-change journey. It also allows councils time to do the necessary work to engage with relevant partners, such as local rescue groups. As demonstrated in the examples in section (h), the success of cat containment laws is incredibly dependent on community buy-in and engagement. Additionally, there is a high risk that a statewide policy would overlook the cultural needs of different communities.

Recommendation 8: Encourage local governments to develop and implement companion animal management plans that address objectives, strategies, monitoring and evaluation, to help drive continuous review and improvement of cat management.

(f) The effectiveness & benefits to implementing large scale cat desexing programs

Desexing does not alter a cat roaming or hunting behaviour, therefore it has little to no effect on the predation impact of individual pet cats. As detailed previously – the presence of one, desexed, male cat was responsible for the collapse of a breeding colony of little terns in Mandurah Western Australia.

However, desexing is an important component of responsible pet ownership. Desexing helps to reduce the uncontrolled breeding of cats, and may benefit biodiversity by reducing the overall number of pet cats and reduce the transition of pet cats into the “stray” or feral cat population (and hence the population size of stray and feral cats)¹⁰.

Curbing the number of pet cats

The key strategy recommended for stemming domestic cat numbers is preventing unplanned breeding events, i.e. ensuring all pet cats are desexed before they reach breeding age at around 16 weeks of age. Unwanted litters that result from owners not desexing their cats or letting them roam freely outside are a regular source of animals into pounds and shelters; RSPCA NSW shelters can receive up to 500-600 surrendered kittens/week during peak breeding season⁵⁰. Unwanted litters also end up abandoned, and contribute to the free-roaming, “stray” cat population. Curbing breeding by de-sexing is particularly important in remote and disadvantaged local government areas, where residents and agencies generally have lower capability to enforce other components of the cat management challenge.

Part of this work should involve normalising pre-pubertal desexing (i.e. desexing between 12-16 weeks of age) to prevent cats becoming pregnant with a first litter, and inspiring councils to take a proactive approach to cat management. In 2021 a national survey was conducted of 240 councils³¹ which found that the majority of local governments have a reactive/passive approach to pet and “stray” cat management. This strategy should involve better understanding, and demonstrating, the cost-benefit value of proactively managing companion animals.

Recommendation 9: Provide ongoing funding for councils to undertake large-scale desexing, microchipping and registration programs, and fund effective education programs to encourage people to keep cats indoors. Continue to disallow trap neuter release programs which do not reduce the impacts cats have on wildlife.

⁵⁰ RSPCA NSW 2021, [Warmer and longer days mean it's kitten season](#), viewed 22 November 2024.

(g) The impact of potential cat containment measures on the pound system

Data suggests that primary pressures on the pound system are created by unowned cats, rather than pets. During the NSW Rehoming Practices Review the Centre for International Economics (CIE) compiled data on NSW pounds, including the numbers of animals entering and leaving pounds, and their source³². In 2020/21, 21,000 cats entered NSW pounds. Of these, 39% were rehomed, 32% were euthanased, 19% were sold and 5% were released to owners. CIE identified that the majority of cats entering pounds were unowned animals (such as “strays” and feral cats) - not pets. Although it was not the focus of their report, CIE predicted that cat containment policies ‘would increase animals into pounds for some period’ due to the collection of more pet cats ‘but may reduce animals into pounds in the longer term if this leads to better cat population control’. Any legislative changes introduced should give councils the flexibility to work with the community to implement laws in ways that minimise stress on the pound system; for example, rather than utilising impoundment as a first enforcement option – councils could initiate conversations with cat-owners, issue warning letters and dictate phase-in periods to allow communities to adjust.

Cat containment rules are a strategy specifically targeted to change the behaviour of owners who have pets. They should not be confused or conflated with management issues associated with unowned cats. As demonstrated previously under heading (a), many free-roaming cats in residential areas belong to humans, with at least 35-50%^{2, 3} of NSW cat owners reporting that they allow their cat to freely roam. Introducing cat containment policies to improve responsible pet ownership, should be complemented and operate simultaneously with strategies and actions to manage unowned cats. As the focus of the review is pet cat containment, we have not examined management options for unowned cats. However, the data above indicates that the main types of cats currently entering pounds are not the targets of a cat containment policy, and therefore other strategies are needed to alleviate pressure on pounds.

Recommendation 10: In conjunction with cat containment policies, investigate and implement strategies to reduce the key pressures on the pound systems (i.e. unowned cats).

(h) The outcomes of similar policies on cat containment in other Australian state or territories

National overview of cat containment legislation and policies

Local governments are the authority responsible for companion animal management. State legislation establishes the general requirements for companion animal management, including what applies state-wide, and whether or not local governments have the power to create locally relevant companion animal management laws, and the scope within which they can make such laws.

NSW and Western Australia (WA) are the only states that do not provide local governments with a clear legal pathway to develop and enforce a local cat containment rule. Elsewhere in Australia, jurisdictions are increasingly adopting cat containment policies.

In 2022, the Australian Capital Territory (ACT) introduced territory-wide cat containment in line with strategies and actions outlined in their strategic ACT Cat Plan 2021-2023⁵¹. The ACT is the only state or territory that has advanced to a jurisdiction-wide containment policy. ACT's approach has two layers: 1) all cats born after 1 July 2022 are required to be contained, and 2) the Minister can declare specific areas as cat containment in which all cats, regardless of age, must be contained⁵². The ACT has taken this phase-in approach to help cat owners in the ACT make the transition, as they recognise it will take time for owners and cats to adapt. Before taking a territory-wide approach, Canberra introduced cat containment to different suburbs. Prior to 2022, Canberra had already declared 15 suburbs, and 2 areas within suburbs, as cat containment zones⁵³. The declarations were made as part of the ACT government's commitment to declare all new suburbs as cat containment zones.

In Victoria, local governments are allowed to create an order to require cat containment. Of Victoria's 79 councils, at least 42 councils have introduced a cat curfew (24/7 or nighttime). For example, the City of Greater Bendigo ordered cats to be contained at all times from July 2024. This order replaced an existing order that required cats to be contained from sunset to sunrise; this is a regular pattern amongst councils, with councils upgrading their policies over time. In Victoria there are several initiatives and structures that have supported councils to introduce containment laws. In 2018, Zoos Victoria, in partnership with the RSPCA, introduced the Safe Cats, Safe Wildlife campaign. The campaign's goal is to help wildlife by building a community of cat owners who keep their cats at home. This initiative has produced materials and resources to raise awareness and help owners keep their cats contained and encouraged councils to sign-on as supporters. In Victoria, state legislation also requires councils to produce a domestic animal management plan every four years, which prompts councils to consider emerging issues to address.

⁵¹ ACT Government 2021, [ACT cat plan 2021-31](#), Canberra.

⁵² ACT Government 2022, [Domestic Animals Legislation Amendment Act 2022](#)

⁵³ ACT Government 2019, [Domestic Animals \(Cat Containment\) Declaration 2019 \(no 1\)](#)

Outcomes of cat containment in other Australian states and territories

The act of introducing a policy alone is not enough to shift human behaviour. While some cat owners will be responsive to legislation, voluntary compliance cannot be relied upon. The effectiveness of any policy is dependent on: communities understanding and being made aware of the policy and that it will be enforced. Cat containment policies have been implemented with varying success across Australia. We acknowledge that limited information is publicly available on programs that have tracked changes in roaming cat populations over time. However, we detail below policy approaches from four jurisdictions and their perceived success. The case studies provide important lessons, for how NSW might approach introducing cat containment laws.

Case study 1: Effective implementation of cat containment on Bruny Island, TAS

Kingborough Council introduced a cat containment by-law to Bruny Island in 2018 and had a local officer who worked closely with the community to help them understand the changes and transition their cats to 24/7 containment. Kingborough Council report that there is now 74% compliance with their cat containment by-law⁵⁴. The local officer reported that cat containment laws helped underpin work to change how the community cares for their cats, but was just part of the picture. To increase the number of people keeping their cats contained Kingborough council: consulted with the community, implemented an awareness campaign, ran community programs with schools, collaborated with animal rescue groups, undertook monitoring and enforcement with a community ranger, assisted households with transitions, encouraged the community to report cat sightings, and worked one on one where possible. This case study demonstrates how areas that have taken a strategic and measured approach have experienced a lot of success with cat containment laws.

Case study 2: Lessons from 24/7 cat containment in Queensland

Queensland councils are empowered by the *Local Government Act 2009* and *Animal Management (Cats and Dogs) Act 2008* to create local laws, including containment, for the management of pet cats. In 2010, the Queensland government created ‘Model Local Law No. 2 (animal management) 2010’, which councils are encouraged to adopt⁵⁵. This model law has 38 different provisions covering a range of companion animal matters, including one that requires all pet owners to ensure their animals do not wander at large and have an enclosure that prevents their animal/s from wandering. This requirement thereby appears to require the 24/7 containment of dogs and cats. Of Queensland’s 77 local government areas, 75 have adopted Model Local Law No. 2 (animal management) as is, which requires 24/7 cat containment. Therefore, on paper, it would appear that Queensland councils have the highest adoption rate of cat containment policies. However, anecdotally, it appears there is generally very low public awareness of the requirement, and exceedingly low levels of enforcement

⁵⁴Allen, K 2023, Presentation to the National Domestic Cat Management Working Group on behalf of Kingborough Council.

⁵⁵ Queensland Government 2022, [Guidance notes: Model local law no. 2 \(animal management\) 2010 version 1.2](#), viewed 18 November 2024.

and compliance. Even some councils are not aware that cat containment is required in their local laws. This example would caution against introducing blanket policies without any engagement and education of the community. In Australia, pet cats have historically had the right to roam – and cat containment is a relatively new concept - therefore a proactive approach is needed to help shift public consciousness and take owners on a behaviour change journey around the keeping of pet cats. Queensland Councils that have proactively interpreted and promoted rules around cat containment experience greater levels of community awareness, such as Brisbane City Council.

Case study 3: Successful cat prohibition in Halls Gap, Victoria

Halls Gap, Victoria is nestled within Grampians National Park. The Northern Grampians Shire Council introduced a local law in 1993 that bans residents from keeping pet cats in order to help protect the Grampians' native wildlife⁵⁶. The local law was considered contentious when it was first introduced, but was accepted and over time, led to broad community awareness and created a strong culture of not keeping cats, that is now socially enforced. The law states anyone caught in possession of a cat must pay a \$100 fine and there are cat prohibition signs throughout town. However, the ongoing success of the policy is likely attributed to its long-standing and social enforcement.

Case study 4: Observations of differing cat policies in Tweed Shire Council, NSW

In general, the effectiveness of legislation at reducing roaming cat levels is difficult to understand because of a lack of local monitoring of cat presence/absence pre and post-introduction of cat-containment or prohibition bylaws. However, Tweed Shire Council is an exception. Through the application of the NSW *Companion Animals Act 1998* and planning and development controls, Tweed Shire Council have been able to create areas with cat prohibition, cat containment and overnight curfews in parts of their LGA. The council has monitored bushland adjacent to these locations for up to three years. Cats are detected more frequently in areas adjacent to locations with partial restrictions compared to areas with total prohibition. Data from this council would suggest that total prohibitions are more effective than partial cat restriction, even with background rates of non-compliance, because the total population of pet cats is much lower in a prohibition¹⁰. Further research would be required to understand whether containment or prohibition approaches are generally more effective, as well as concurrent long-term wildlife monitoring to examine any effects of cat management strategies.

⁵⁶ Miles, D 2023, [Grampians council mayor says Halls Gap cat ban of 30 years is working](#), ABC News, 15 June, viewed 18 November 2024.

(i) Options for reducing the feral cat population

Feral cats have continuing devastating impacts on biodiversity across almost all of Australia, and are widely recognised as one of the main factors driving decline in Australian biodiversity. Reducing this impact needs a strategic response, prioritising action to address impacts on native species whose population viability is most affected by cats. Enduring eradication of feral cats from sites where such species occur (or can be re-introduced to) is necessary to safeguard such species and prevent their extinction.

Feral cat control is complex in nature and requires the availability of a broad suite of management tools that can be implemented as appropriate to the local management context. It is essential that lethal control tools, including the use of toxins such as PAPP and 1080, remain available for use to manage feral cats.

A draft of the updated national threat abatement plan (TAP) for predation by feral cats was released last year and is due for finalisation⁵⁷. The TAP comprehensively identifies options to manage the feral cat population. The NSW government should implement feral cat control in accordance with the TAP. The NSW Government should also draw on the 2020 Commonwealth inquiry into the problem of feral and domestic cats in Australia and its recommendations⁵⁸.

Feral cat management is a significant issue and should not be conflated with pet cat management. The NSW government should review options for reducing the feral cat population more extensively in a separate inquiry, or via the development of a state-wide cat management plan.

Recommendation 11: Review state actions and obligations identified in the national feral cat threat abatement plan and use this as guidance to manage feral cats in NSW.

Recommendation 12: Develop a state-wide cat management strategy that clearly articulates a vision and goals to achieve positive outcomes for cats, other animals, people and the environment. The plan should define, identify and address strategies for managing pet, feral and other cats.

⁵⁷ Department of Climate Change, Energy, the Environment and Water, [Threat abatement plan for predation by feral cats 2023 – consultation draft](#), Canberra.

⁵⁸ Commonwealth of Australia 2020, [Tackling the feral cat pandemic: a plan to save Australian wildlife](#).

(j) Any other related matters

Legal obligations to reduce the impact of feral and pet cats on wildlife

The New South Wales (NSW) government has a legal and social responsibility to reduce the impact that feral and pet cats have on wildlife:

Federal law

Predation by cats is one of the most significant threats to Australia's fauna. Predation by feral cats is recognised under the national environmental law, the *Environment Protection and Biodiversity Conservation Act 1999*, as a Key Threatening Process (KTP) that is driving the imperilment of many mammal, bird and reptile species, including many threatened species. Feral cats affect at least 230 nationally-listed threatened animal species and have been the key driving factor of around 30% of Australia's faunal extinctions^{59,60}. The federal government's KTP listing is accompanied by a Threat Abatement Plan (TAP) which includes responsibilities for state governments to effectively protect wildlife from feral cats and to promote responsible pet cat ownership⁶¹.

State laws

Similar to federal law, 'Predation by the feral cat *Felis catus*' is listed as a key threatening process by NSW's *Threatened Species Conservation Act 1995*. Additionally, the NSW *Biosecurity Act 2015* creates a duty for every individual to prevent, eliminate or minimise the adverse biosecurity effects that pest species, such as cats, have on the environment.

International obligations

As a signatory to the United Nations Sustainable Development Goals (SDG), Australia has committed to SDG 15.8: '*By 2020, introduce measures to prevent the introduction and significantly reduce the impact of invasive alien species on land and water ecosystems and control or eradicate priority species.*⁶²'

⁵⁹ Department of Climate Change, Energy, the Environment and Water 2023, [Background document for the threat abatement plan for predation by feral cat](#), Canberra.

⁶⁰ Woinarski *et al.* 2019, '[Reading the black book: the number, timing, distribution and causes of listed extinctions in Australia](#)', *Biological Conservation*, v. 239.

⁶¹ Australian Government 2015, [Threat abatement plan for predation by feral cats](#), Canberra.

⁶² United Nations General Assembly 2015, [Transforming our world: the 2030 Agenda for Sustainable Development](#), viewed 14 November 2024.

Background: Existing powers available to NSW councils to manage free-roaming pet cats

The general consensus is that there is no direct, practical pathway for councils in NSW to enact cat containment generally across their jurisdiction.

The *NSW Companion Animals Act 1998* has no cat containment requirements, nor does it empower councils to enforce local cat containment rules. However, the Act automatically prohibits cats from food preparation/consumption areas, and there are some provisions for cat prohibition in specific areas designated for wildlife protection. Councils also have some capacity under environmental planning instruments (i.e. development consent, development control plans, local environment plans) to pursue cat containment or prohibition in new residential developments. For example, councils can require developers to establish a cat containment or prohibition by law as a condition of development consent where there are reasonable grounds to do so. These instruments are empowered by the *NSW Environmental Planning and Assessment Act 1979*.

Legal advice from several separate sources, including legal advice provided directly to councils, has concluded that there is no practical pathway for NSW councils to create general cat containment rules (personal comms.). However, Queanbeyan-Palerang Regional Council (QPRC) challenge this conclusion. QPRC has introduced a 24/7 cat containment policy⁶³ to seven areas within its jurisdiction using Order 18 in the Local Government Act 1993 (Table 4). In their policy, QPRC explain ‘Section 124 of the Local Government Act does allow a Council to place an order on a premises for the keeping of animals. In regards to this, Council would apply this Policy to a group of premises within the Googong Township, Googong Sunset... and any future greenfield residential developments in Queanbeyan Palerang’. It is uncertain whether or not this would hold up in a court of law. Alternate legal advice received (personal comms.) concluded that the law could only be used on a ‘cat by cat’ basis and that it would be difficult in the current NSW legislative environment to establish that permitting a cat to roam outside the premises was ‘keeping an animal inappropriately’ as required by Section 124. This example demonstrates legislative changes are needed to create a clear, direct and practical pathway for councils in NSW to enact cat containment generally across their jurisdiction. Unclear and ambiguous legislation can results in misinterpretation and make it harder for councils to utilise.

⁶³ Queanbeyan-Palerang Regional Council 2023, [QPRC cat containment area policy 2023](#).

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