

Keeping Cats Safe at Home

Behaviour Change Strategy Report

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Background

Predation and competition by domestic cats, *Felis catus*, threatens the survival of many native animal species (Legge et al., 2020). Hunting and killing is instinctive, and even well-fed, owned pet cats hunt when given the opportunity. There are more than 500,000 registered cats in NSW, and thanks to their high reproductive rate (on average one female cat will produce two litters of four kittens each year), cat populations can grow rapidly (Woinarski, Legge, & Dickman, 2019). The NSW RSPCA project 'Keeping cats safe at home', funded by the Environmental Trust, aims to work with ten local government areas (LGAs) to develop and implement targeted behaviour change strategies to reduce domestic cat predation on wildlife and improve their safety by encouraging responsible cat ownership. This includes de-sexing, microchipping, registration and containment of owned pet cats.

Changing behaviour, and sustaining these changes over time, is a difficult process. Educating the public about the adverse impacts, and providing information about management strategies, is rarely enough. Effective behaviour change strategies require a more sophisticated, systematic approach underpinned by behavioural science theory. There is an array of behaviour change strategies designed to increase audience understanding, engagement and, ultimately, adoption of desired behaviours, however most are based on the four guiding principles (McLeod, Hine, & Driver, 2019):

1. Focus on human behaviour.
2. Know your audience.
3. Match your interventions to the primary causes of behaviour.
4. Apply science-based evaluation.

Stakeholder and community consultation is an important component of the 'Keeping cats safe at home' to understand the human behaviours required to address cat management issues within the selected LGAs, as well as getting to know the target audience within these communities. A mixed methods approach was used to collect information during the consultation process, incorporating partner council and stakeholder interviews, and a survey of residents and cat owners within the selected LGAs. This target audience survey was conducted both by phone, and available online. Human ethics approval was obtained from the University of Sydney's Human Research Ethics Committee (Project Number 2021/473).

This report will:

- Present preliminary analysis of the results from both the stakeholder and community consultation that has been undertaken in each of the selected LGAs.
- Outline the most effective behaviour change strategies to encourage cat owners to contain their pet cats to their properties in each of these LGAs, including
 - What activities should be undertaken to best achieve outcomes
 - How various activities should be targeted towards different cat-owning subgroups within each LGA

Methods

Key Stakeholder Interviews

Council partners and other identified stakeholders were consulted either individually or in small groups. The ongoing COVID situation and lockdown orders meant that these interviews were mainly conducted virtually. Interviewees were also asked to complete a short online survey (Appendix 2 & 3) to collect baseline information and quantitative data about their organisation's current involvement with cat management, thus allowing more time in the interviews to clarify these responses and explore the raised issues in depth.

Partner Councils

Eleven LGA's were chosen to be part of this project:

- Blue Mountains City Council (Population 76,904)
- Byron Shire Council (Population 31,556)
- Campbelltown City Council (Population 157,006)
- Hornsby Shire Council (Population 142,667)
- Kyogle Shire Council (Population 8,940)
- Northern Beaches Council (Population 252,878)
- City of Parramatta Council (Population 226,149)
- Shoalhaven City Council (Population 99,650)
- Tweed Shire Council (Population 91,371)
- Walgett Shire Council (Population 6,107)
- Weddin Shire Council (Population 3,664)

The priorities for the interviews with the Partner Councils were to:

- Establish a working relationship and appoint a representative to the project team
- Collect baseline data on domestic cat registration and current cat complaints
- Investigate current cat management initiatives, as well as their future intentions
- Identify the driver and barrier factors associated with their current initiatives.

Other Stakeholders

A range of stakeholder groups and individuals were interviewed from across the selected LGAs. These included:

- Cat protection groups
- Animal Welfare organisations
- Wildlife conservation & rescue groups
- Veterinarians
- Land management and Natural Heritage groups
- Indigenous Elders group

In addition, several organisations that were not specifically based in the selected LGAs but have an interest or conduct cat management related activities were interviewed. These were:

- Cat Protection Society
- Inner City Strays
- Sydney Wildlife
- NSW National Parks & Wildlife Services
- Landcare NSW
- Cat Harness Australia
- CatNets
- Threatened Species Hub
- RSPCA Victoria
- Canberra Street Cat Alliance

These interviews with other stakeholders were to:

- Collect information on their perspectives and involvement with domestic cat management
- Gain an understanding how they are affected, their priorities and interests
- Identify behaviours that are either being performed, or that are required to be performed, and possible barriers and drivers of behaviour performance
- Identify potential conflicts between personal interests and what is collectively desirable.

Target Audience Survey

Phone Survey

A random digit phone survey of cat owners within five of partner LGAs was conducted to assess a representative sample cat owners (Hine, Kormos, & Marks, 2016). The phone survey targeted five of the selected LGAs, resulting in 507 completed surveys – Blue Mountains (n=209), Campbelltown City (n=159), Tweed Shire (n=71), Byron Shire (n=38) and Kyogle Shire (n=30). The survey collected information on:

- Cat owners' current adoption or performance of the responsible cat ownership behaviours, and their likelihood of future adoption / performance
- Background information about the cat owner and their property that may influence their behaviour - how big is their home, do they have access to an outside space.
- Any specific factors that have prevented them adopting cat containment behaviours
- Agreement (on a 5-point Likert scale) to a sample of pre-identified drivers and barriers to cat containment, which had been selected from a review of previous research.

Online Survey

The survey was also be made available online, and advertised throughout NSW, enabling people across all NSW communities who are interested in this issue to also have their say. As of the 13/11/2021, 8204 responses had been received for the online survey. Unfortunately, 335 were not able to be used (39 contained little data, the LGA of 40 could not be determined, 140 were from other States and Territories, 116 did not indicate if they had a cat or not and nine were obvious repeated entries) – leaving a total of 7863 for analysis. Responses were received from 4221 cat owners and 3642 people who do not own cats, across 105 of the 128 NSW LGAs (Table 1). Most responses (5582, 71%) were from the selected LGAs - 2773 cat owners and 2809 people who do not own cats.

Table 1: LGA and cat ownership status of online survey respondents.

LGA	Owners	Don't own	Total	LGA	Owners	Don't own	Total
Albury	9	3	12	Liverpool	49	18	67
Armidale	14	8	22	Lockhart	0	1	1
Ballina	8	12	20	Maitland	14	8	22
Bathurst	8	4	12	Mid Coast	6	8	14
Bayside	21	9	30	Mid-Western	3	2	5
Bega Valley	2	4	6	Monaro	4	2	6
Bellingen	7	5	12	Moree Plains	1	1	2
Blacktown	44	13	57	Mosman	14	17	31
Bland	1	0	1	Murray	1	0	1
Blayney	0	1	1	Muswellbrook	2	0	2
Blue Mountains	376	307	683	Nambucca	1	1	2
Broken Hill	1	0	1	Narrabri	3	1	4
Burwood	1	2	3	Narrandera	1	1	2
Byron	69	212	281	Narromine	1	0	1
Cabonne	6	2	8	Newcastle	23	6	29
Camden	88	46	134	North Sydney	34	18	52
Campbelltown	291	224	515	Northern Beaches	626	846	1472
Canada Bay	28	8	36	Oberon	0	1	1
Canterbury	49	55	104	Orange	11	3	14
Central Coast	67	44	111	Parkes	4	3	7
Cessnock	9	8	17	Parramatta	364	116	480
City of Sydney	76	32	108	Penrith	38	13	51
Clarence Valley	8	7	15	Port Macquarie	7	7	14
Cobar	1	0	1	Port Stephens	19	14	33
Coffs Harbour	7	12	19	Queanbeyan	9	3	12
Cootamundra	4	0	4	Randwick	24	10	34
Cowra	0	1	1	Richmond Valley	4	7	11
Cumberland	46	13	59	Ryde	24	13	37
Dubbo	14	3	17	Shellharbour	12	6	18
Dungog	2	2	4	Shoalhaven	271	324	595
Eurobodalla	7	13	20	Singleton	3	0	3
Fairfield	15	4	19	Snowy Valleys	1	0	1
Forbes	3	4	7	Strathfield	7	5	12
Georges River	15	3	18	Sutherland	45	19	64
Glen Innes	6	2	8	Tamworth	10	7	17
Goulburn	5	5	10	Tenterfield	1	3	4
Griffith	1	1	2	Tweed	296	375	671
Gunnedah	4	3	7	Upper Hunter	1	2	3
Hawkesbury	20	11	31	Upper Lachlan	4	2	6
Hills	65	22	87	Uralla	1	0	1
Hornsby	391	248	639	Wagga Wagga	2	3	5
Inner West	122	104	226	Walgett	9	4	13
Inverell	4	1	5	Warrumbungle	3	1	4
Junee	1	0	1	Waverley	15	2	17
Kempsey	3	0	3	Weddin	56	87	143
Kiama	5	4	9	Wentworth	1	0	1
Ku-ring-gai	50	30	80	Willoughby	28	15	43
Kyogle	24	66	90	Wingecarribee	14	10	24
Lake Macquarie	29	7	36	Wollondilly	34	21	55
Lane Cove	12	6	18	Wollongong	42	31	73
Leeton	1	1	2	Woollahra	6	6	12
Lismore	21	21	42	Yass	2	0	2
Lithgow	9	6	15				
						Grand total	7863

Consultation Results

The results of the stakeholder and community consultation process for each LGA are detailed below. This consultation process has increased our understanding of the selected LGAs' communities. As a result, a range of driver and barrier factors to participation in cat management activities within each LGA was able to be identified, along with the main leverage points and the specific behaviour change techniques that will need to be targeted to improve the outcomes of future cat management activities.

The COM-B (Capability, Opportunity, Motivation – Behaviour) is an excellent framework for identifying and organising potential causes of behaviour and assisting with selecting the most appropriate behaviour change tools (Michie, Atkins, & West, 2014). Categorising the drivers and barriers using the COM framework allows for easier selection of the best behaviour change tool for the job:

- **Capability factors** - Interventions should aim to educate, train and support.
- **Opportunity factors** - Interventions should aim enable, provide, facilitate, offer, prompt or constrain.
- **Motivation factors** - Interventions should inform, persuade, discuss, demonstrate, incentivise or coerce.

Suggestions for each of the identified leverage points are provided in Appendix 1. Note that the LGAs will not be able to tackle all identified leverage points at once and will need to prioritise. It not wise to try and change too many behaviours at once – people may be overwhelmed and disengage completely.

Blue Mountains City Council

Council Interview Results

Baseline cat data

The Blue Mountains City Council reported they had:

- 16,709 registered cats
- 9191 microchipped cats

The number of de-sexed cats was unknown.

Current cat management initiatives

Blue Mountains City Council undertakes a range of cat management initiatives. In partnership with the RSPCA and vets from the Blue Mountains Veterinarian Association, they offer the Community Animal Welfare Scheme (CAWS) – a program that provides subsidised de-sexing, vaccination and registration of cats and dogs to owners in low-income households. They strongly recommend cat containment as part of 'responsible cat ownership'

The NSW Companion Animals Act 1998 allows Councils to declare Wildlife Protection Areas (WPAs). Blue Mountains City Council have declared two WPAs which contain public areas where cats (controlled or not) are prohibited.

Compliance monitoring

As part of compliance monitoring this LGA cross-checks entries in the Companion Animal Register to access information regarding those cats not registered and / or de-sexed. Owners are contacted, advising them of the Council's requirements. If ignored penalty infringement notices are then issued. Compliance is also monitored when individual cats are either brought to their attention and / or impounded. They did not specify if the WPAs were monitored.

Information

The Blue Mountains City Council provides information on responsible cat ownership on their website. They also conduct a school education program 'Connect to Nature'.

Nuisance cats

Nuisance cat complaints are assessed by the Council Officers, who approach the owner of the cats to discuss the issue and seek a positive response or provide education material to address the nature of the complaint.

Stray and feral cats

Stray and feral cats pose a problem within the LGA although extent is not quantified. The Council does not have a targeted program, but cats often trapped during fox trapping activities. Any domestic and microchipped cats trapped are returned to their owners via the pound, while the rest are euthanised.

What the Council thought was working well

When asked what is working well with their current cat management initiatives Council were very positive about the CAWS program. They thought this program provided a positive way to connect cat owners with local vets and improve their care and welfare.

Challenges to effective cat management

The main challenges of cat management identified by this LGA:

- The limitations of the current legislation to regulate roaming cats and enforce cat containment
- Reliance on behaviour change programs which are costly and resource intensive and beyond the current resources of council to implement
- Current CAWS program massively oversubscribed every year, so unwanted breeding still occurring
- Proportion of cat owners will not take responsibility for their cat's behaviour.

Future intentions

Identified future cat management intentions:

- Gaining an understanding of cat owners' attitudes and knowledge to develop targeted behavioural change strategies (e.g., use of local champions and passionate experts to deliver messages)
- Inter-agency coordination with cat management programs
- Strengthening current legislation
- Increasing awareness of roaming cat impacts
- Increasing practical knowledge of planning approval and costs of cat containment
- Increasing microchipping and de-sexing.

Stakeholder Interview Results

Involvement in cat management

A range of stakeholders from the Blue Mountains LGA were interviewed. Their roles and activities related to cat management:

- **RSPCA:** rehome cats and currently runs the pound for Blue Mountains Council
- **Blue Mountains World Heritage Institute:** monitors the presence and movement of fauna (including cats) along the urban-bushland interface.
- **Katoomba Vet Hospital:** 30% of practice is cats. Works with rescue organisations and has the council contract, via RSPCA shelter.
- **Blue Mountains Conservation Society:** Concerned about the impact of cats on wildlife.
- **Blue Mountains Bird Observers Inc.:** Not specifically involved in management of domestic cats. Some members care for injured birds.
- **Greater Sydney Local Land Services:** Not directly involved in the domestic cat management but support a fox trapping program which can trap cats.
- **Cat owning member of the public:** Feels all cat owners should take responsibility for their own animals and their behaviour.

What stakeholders' thought was working well

Stakeholders were asked what was working well for cat management in their local LGA. The main factors identified by the stakeholders:

- Shift in social norms / pressure around cat management over the last several years
- Good understanding by most owners that cats should be kept at home
- Having the RSPCA shelter
- Most cats arriving at the pound now are microchipped.

Challenges to effective cat management

The main challenges to effective cat management identified by the stakeholders:

- The population of cat owners that are used to allowing their cats to roam
- Proximity of residential areas to large tracts of bushland, so high risk of impact on a range of native wildlife
- Education of cat owners on what to do if cat brings home wildlife
- Many people live close to the bush and away from busy roads so perceive few risks for the cats
- Separation of domestic cats and feral / unowned cats – is some overlap but there are distinctly different problems and solutions for each category
- Different and strong vocal opinions, not always factual.

Cat management vision

Aim of cat management

Stakeholders were asked what the aim of cat management should be in their LGA. There was consensus among the stakeholders that the main aims should be to make sure as many cat owners as possible are being more responsible and increase adoption of cat containment.

Required information and actions

Stakeholders were asked what information and actions are required to manage cats more effectively in their local LGA. Their responses:

- Information to hand out to adopters when they take their cats home, with tips and options for containment that don't cost a lot of money
- Education material about responsible cat ownership and reduction of cat impacts on wildlife specifically targeting Blue Mountains context which can be distributed through social media and local vets and pet shops
- Businesses could be acknowledged if they support responsible pet ownership practices i.e., sticker/label on doorway
- Demonstration of cat enclosures
- Doling out consequences for negligent cat owners
- A liaison person in council who specifically handles cat management issues
- Subsidising cat runs for a determined period of time
- Cat tracker program would be able to identify local ,movements of cats and be good media opportunity.

How to deal with conflict

Stakeholders were asked about the best ways to deal with conflicts that arise around cat management in their communities. Their suggestions:

- Council liaison who can help mediate with cat concerns between neighbours
- Increase in education and significant consultation to provide consensus solutions
- Evidence of cat impacts - camera trap photos, honest owner reports / survey
- Consequences for cat owners who allow do not follow the rules.

Key Findings (Interviews)

How domestic cat management is being handled is influenced by the capacity and motivation of both the Council and the community. The main benefits of current programs and challenges for the Blue Mountains LGA are summarised below.

- This LGA has seen shift in cat owners' understanding and adoption of responsible domestic cat management, however there is still a small proportion who still do not take responsibility for their cat's behaviour. Current resources of Council do not allow for the development of more targeted behavioural change strategies which are required.
- The subsidised de-sexing program provides a positive connection between cat owners and local vets, but it needs to increase its coverage to increase its effectiveness.
- Current legislation limits ability to regulate roaming cats and enforce cat containment. They would like to see the strengthening of current legislation, as well as an increase in inter-agency coordination with free-roaming cat management programs.

Phone survey

Respondent demographics

Blue Mountains City Council was one of the LGAs to be targeted with the phone survey. Two hundred and nine responses were collected. Most of respondents (69%) were female the remaining 31% were male. The average age of respondents was 57.7 years.

When asked to describe their locality, 154 (74%) indicated they lived in a town or suburb, 50 (24%) as semi-rural, three (1%) as rural and one in a city. Most of the respondents (n=198, 95%) lived in a house with a medium to large outdoor space (yard). Four (2%) lived in a house with only a small outside space (courtyard or small garden). Four (2%) lived in a semi-detached house or townhouse with a garden and two (1%) lived in a semi-detached house or townhouse with only a small outside space (courtyard or small garden). Most of the respondents indicated they owned their dwelling (n=194, 93%), 13 were renting (6%) and two (1%) had 'other' arrangements. One respondent declined to answer any of these questions.

Adoption of responsible cat ownership behaviours

Just over half of respondents (n=114, 55%) had one cat in their household, 74 (35%) owned two cats, twelve (6%) owned three cats, four (2%) owned four cats and the remaining four (2%) indicated they owned more than four cats. One of these respondents reported having eleven cats in their household.

De-sexing rates were high with 206 (99%) respondents reporting their cats were de-sexed. Microchipping rates were a little lower at 91% (n=190), with four respondents unsure. Registration with the local council was lower again at 74% (n=154), although 21 (10%) of owners were unsure if their cats were registered.

Keeping cats indoors at night but letting them roam freely during the day was the most common cat living arrangement (n=79, 38%). The next most popular arrangement was keeping cats indoors all the time (n=64, 31%). Forty-four respondents (21%) allowed their cat indoors and restricted their outdoor access (e.g. in an escape-proof yard / run, or on a lead), and twenty (10%) let their cat indoors and allowed them to roam free when outside. Only one respondent had a cat that lived outside all the time.

Of the respondents who allowed their cats to roam freely outside (n=100), 93 (93%) indicated that their cat would be likely to some extent be roaming freely in the morning (6am-noon), 97 (97%) indicated that their cat would be likely to some extent be roaming freely in the afternoon (noon-6pm), 38 (38%) indicated that their cat would be likely to some extent be roaming freely in the evening (6pm-midnight), while 21 (21%) indicated that their cat would be likely to some extent be roaming freely from midnight to dawn.

The respondents who allowed their cats to roam freely outside were asked about their future intentions of preventing their cats from roaming freely. Results are presented in Figure BM1. In the future respondents were more likely to prevent their cat from roaming more often than they do currently (mean 1.3 where 1= extremely unlikely and 5= extremely likely) than to prevent it roaming freely all the time (mean 1.2) or install a fence or enclosure (mean 1.1).

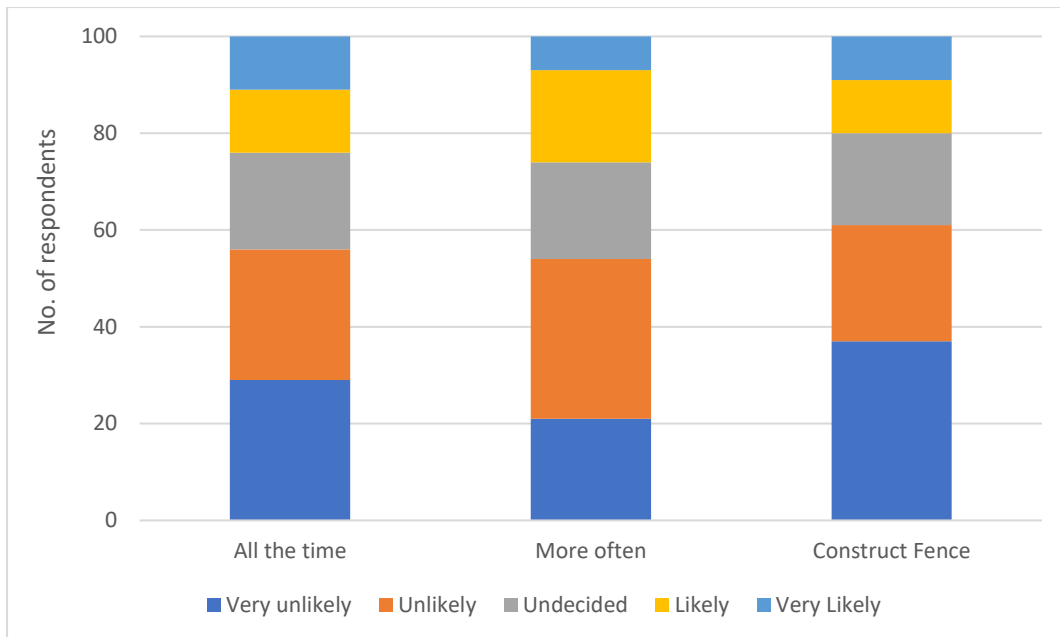


Figure BM1. Likelihood of preventing free roaming of cats in the future across Blue Mountains LGA.

Drivers and barriers to cat containment

Respondents were given the opportunity in an open-ended format to list at least three factors they have considered when deciding whether to allow their cat to roam freely or not. At least one factor was listed by 207 (99%) of respondents. The main factors listed by the respondents when preventing their cat from roaming freely are shown in Figure BM2. Protecting wildlife, including small mammals, birds, and reptiles, was the most popular response. General safety, avoiding fighting with other cats and preventing traffic accidents were the next popular.

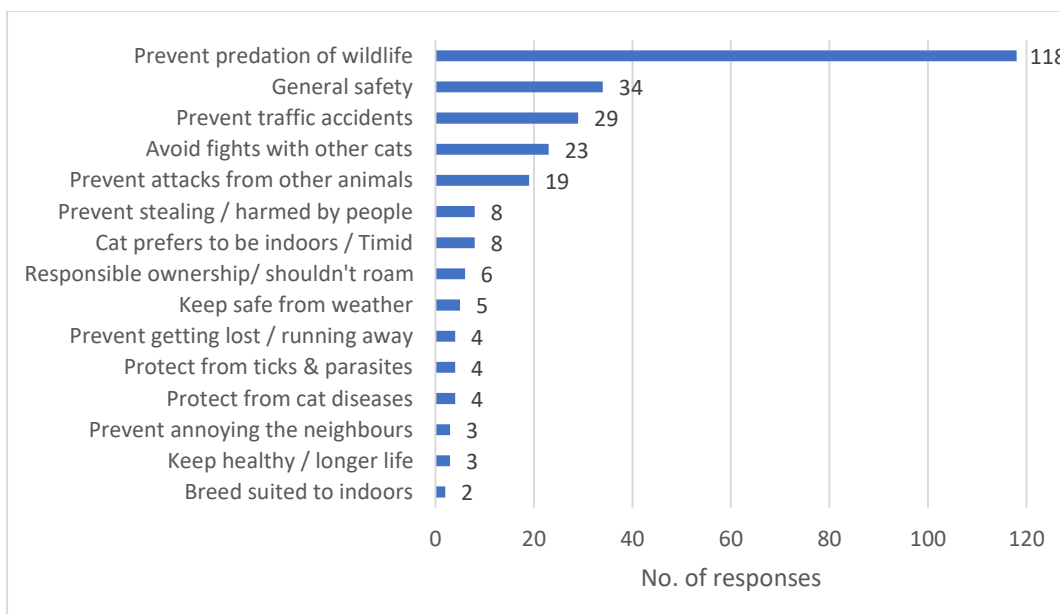


Figure BM2. Main factors considered by respondents when preventing their cat from roaming freely.

The listed factors considered by respondents when deciding to allow their cat to roam freely are shown in Figure BM3. The perception that their cat doesn't roam very far from their property was the top consideration.

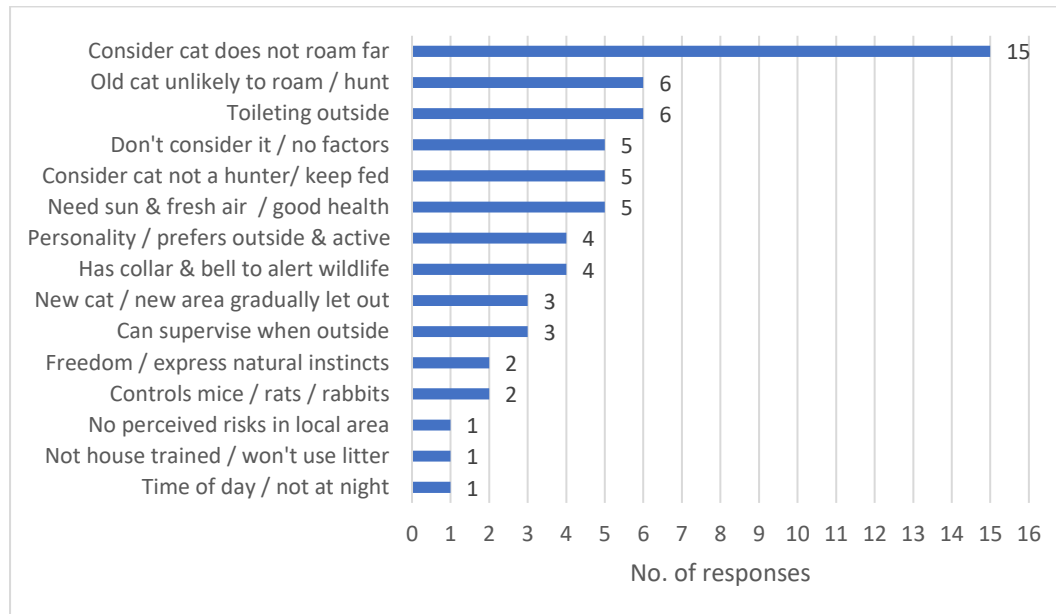


Figure BM3. Main factors considered by respondents when deciding to allow their cat to roam freely.

After listing their own considerations, respondents were then asked to rate their agreement with 14 statements pertaining to previously identified drivers of and barriers to preventing cats from roaming freely (See Q5 in Appendix 4). The average ratings are summarised in Figure BM4.

Most respondents were confident they could prevent their cat from roaming if they wished to, and they could provide everything to ensure their cat was happy. Most respondents disagreed that their current living circumstances made it difficult to prevent their cat from roaming. There were no statistical differences in this agreement rating and respondent's type of dwelling ($F=2.06, p=0.09$), locality ($F=0.39, p=0.82$) or own / rent situation ($F=0.01, p=0.99$).

Wildlife protection and keeping cats safe were strongest drivers of cat containment. This corresponds with the results from the open-ended question (Figure BM2). On average respondents disagreed that cats should be free to roam, however there were statistical differences ($F=11.46, p<0.001$) between those owners who currently restrict their cat's movements (Inside all the time 1.48, Inside & restricted outside 1.55), practice a night curfew (2.19) or let their cats roam freely (Free outside all the time 3.00, Inside & free outside 3.00).

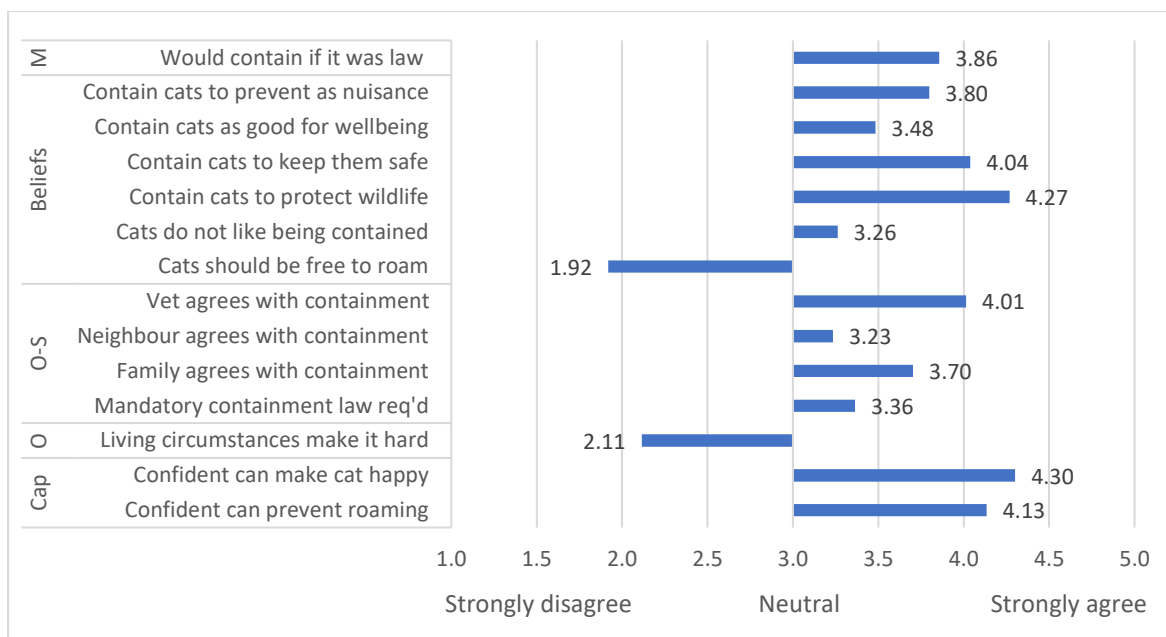


Figure BM4. Mean agreement scores to the 14 driver and barrier statements (Cap=Individual capability factors, O=Physical opportunity factor, O-S=Social opportunity factors, Beliefs=Internal motivational factors, M=External motivational factor).

Online survey

Respondent demographics

- 683 respondents completed the online survey – 376 (55%) were cat owners and 307 (45%) did not own a cat.
- Most cat owners were female (300, 80%), with 50 males (13%). Four cat owners identified as non-binary, and 22 did not answer this question.
- Most non-cat owners were also female (213, 69%), with 81 males (26%), two non-binary and 11 non-responses.
- The overall average age was 50.4 years (± 13.6). The average age for cat owners was younger – 48.3 years (± 12.8), and non-cat owners was older – 52.9 years (± 14.1).

Cat ownership behaviours

The majority of respondents (n=174, 47%) had one cat in their household, 132 (35%) owned two cats, 42 (11%) owned three cats and eight (2%) owned four cats. The remaining 4% owned five cats or more, with the largest number reported eleven.

Keeping cats indoors all the time was the most common cat living arrangement (n=141, 38%). The next most popular arrangement was keeping cats indoors at night but letting them roam freely during the day (n=104, 28%). One hundred and two respondents (27%) allowed their cat indoors and restricted their outdoor access (e.g. in an escape-proof yard / run, or on a lead), and twenty-nine (8%) let their cat indoors and allowed them to roam free when outside. No respondents reported that their cat lived outside all the time.

Feeding of free roaming cats

Sixteen cat owners (4%) and fifteen non-cat owners (5%) indicated they had cared for unowned free-roaming cats.

Drivers and barriers to cat containment

Cat owners were given the opportunity in an open-ended format to list the factors they have considered when deciding whether to allow their cat to roam freely or not. At least one factor was listed by 346 (92%) of cat owners. The main factors listed by the respondents when preventing their cat from roaming freely are shown in Figure BM5. Protecting wildlife, including small mammals, birds, and reptiles, was the most popular response. General safety, preventing traffic accidents, and preventing attacks from other animals, mainly dogs, foxes, snakes, and possums were the next popular.

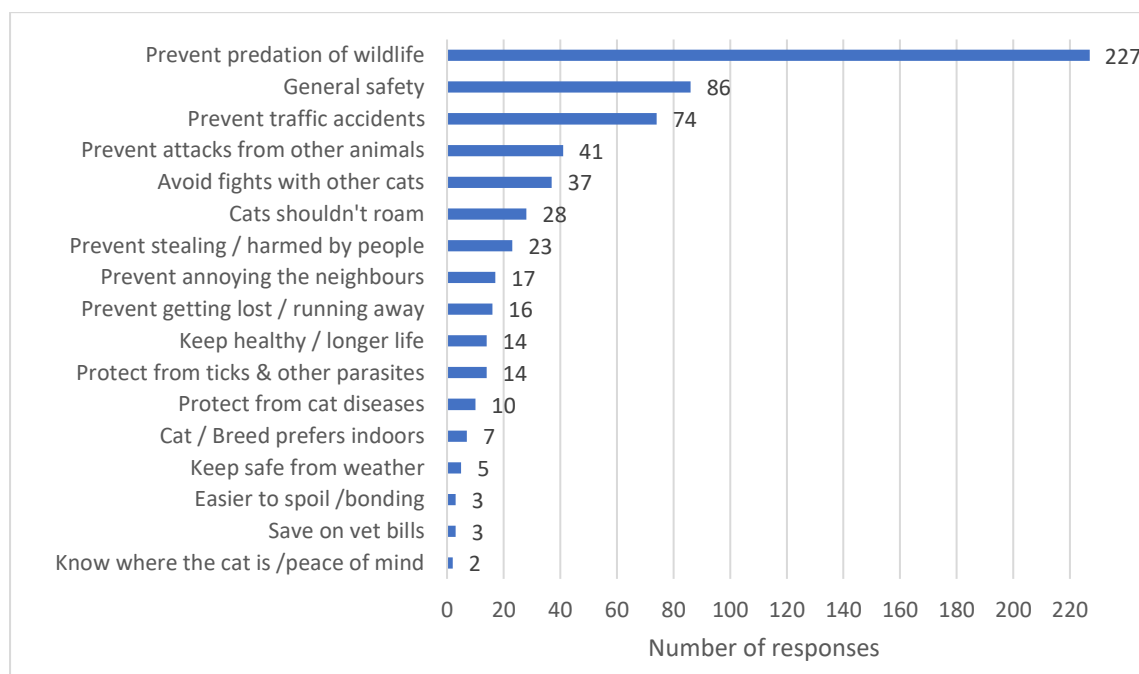


Figure BM5. Main factors considered by cat owners when preventing their cat from roaming freely.

The listed factors considered by cat owners when deciding to allow their cat to roam freely are shown in Figure BM6. The top response was the time of day – cats should be prevented from roaming at night, but it was OK during the day. The next popular responses were the perception that their cat doesn't roam very far from their property and that cats needed to roam to be happy.

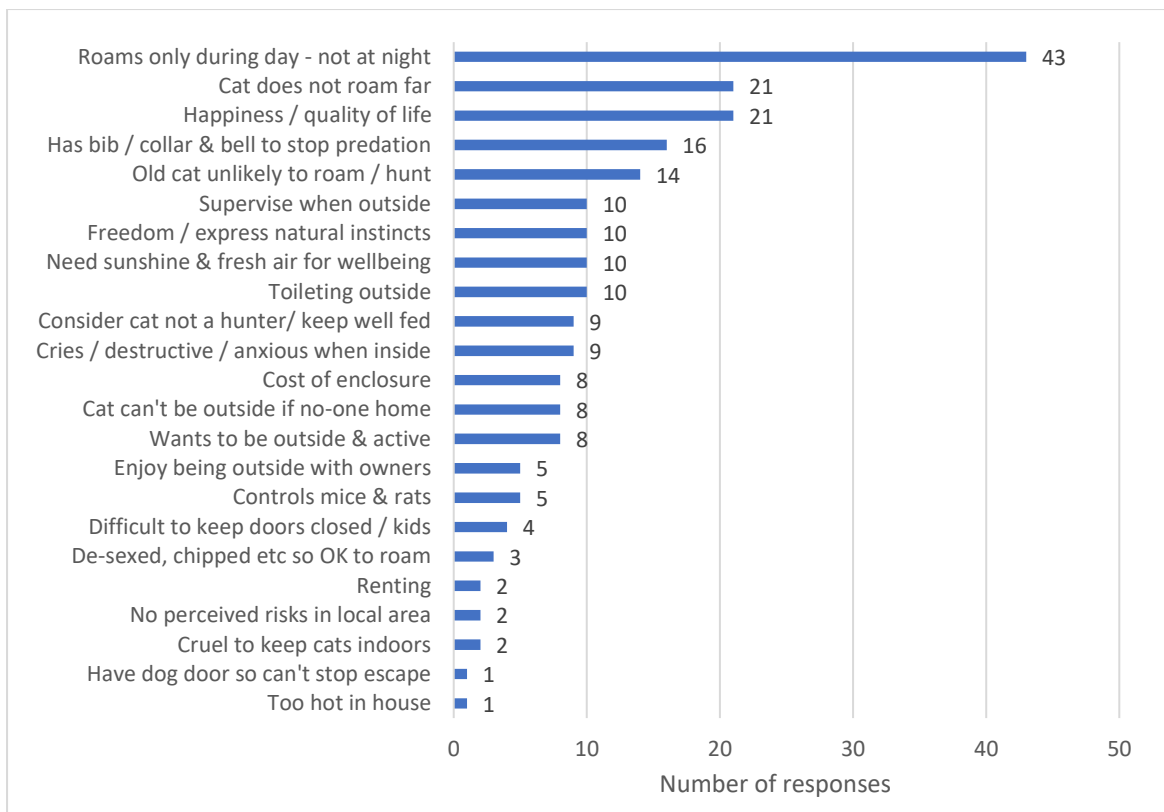


Figure BM6. Main factors considered by cat owners when deciding to allow their cat to roam freely.

After listing their own considerations, cat owners were then asked to rate their agreement with 15 statements pertaining to previously identified drivers of and barriers to preventing cats from roaming freely (See Q7 in Appendix 5). The average ratings are summarised in Figure BM7.

Online respondents were not as confident they could prevent their cat from roaming if they wished to, and they could provide everything to ensure their cat was happy as the telephone survey respondents. Most respondents disagreed that their current living circumstances made it difficult to prevent their cat from roaming. There were no statistical differences in this agreement rating and respondent's type of dwelling ($F=0.63$, $p=0.64$), however there was with the own / rent situation ($F=9.91$, $p=0.003$). Respondents who owned their dwelling disagreed with this statement more strongly (2.14) than those respondents who rented (2.78).

Protecting wildlife was the strongest driver of cat containment. This corresponds with the results from the open-ended question (Figure BM5). On average respondents disagreed that cats should be free to roam, however there were statistical differences ($F=50.82$, $p<0.001$) between those owners who currently restrict their cat's movements (Inside all the time 1.41, Inside & restricted outside 1.44), practice a night curfew (2.62) or let their cats roam freely (Inside & free outside 3.10).

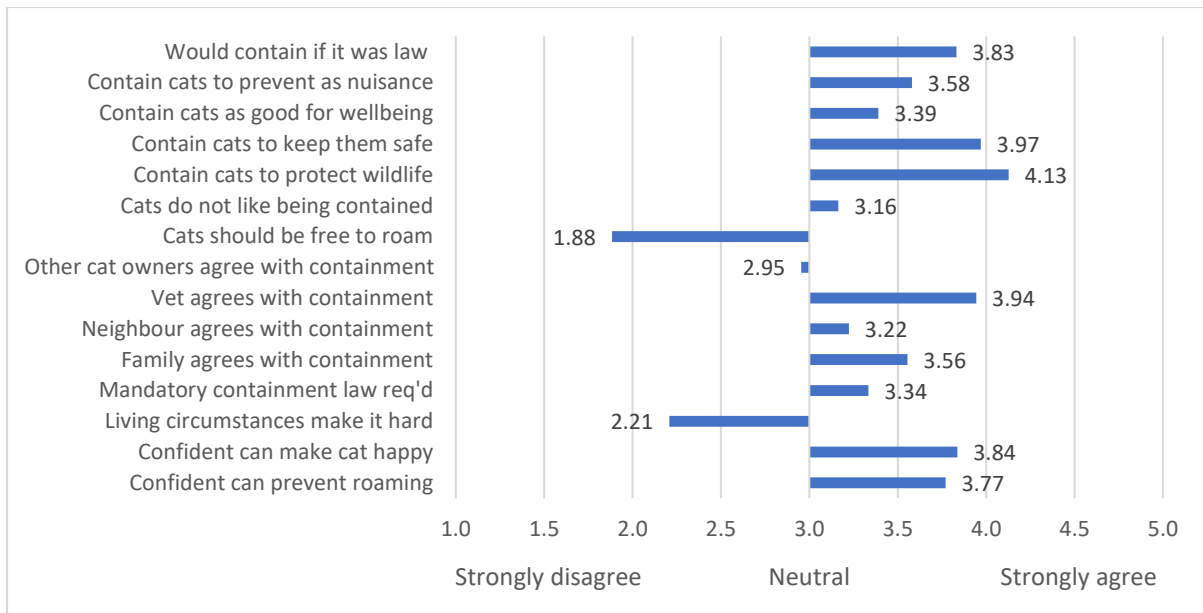


Figure BM7. Mean cat owner agreement scores to the 15 driver and barrier statements.

Those respondents who did not own cats were also to rate their agreement with 10 statements pertaining to previously identified drivers of and barriers to preventing cats from roaming freely. The average ratings are shown in Figure BM8. There were statistical differences between the ratings of cat owners and non-owners for eight of the ten shared statements. Those respondents who do not own cats were more likely to agree that cats should be prevented from roaming to protect wildlife ($F=38.13, p < 0.001$), prevent them being a nuisance ($F=64.16, p < 0.001$) and to improve the cat's well-being ($F=3.84, p=0.05$). They were less likely to agree that cats should be free to roam ($F=65.07, p < 0.001$) and cats did not like to be contained ($F=11.65, p < 0.001$). These respondents also were more likely to agree that their family ($F=64.87, p < 0.001$) and vets ($F=13.80, p < 0.001$) agreed with cat containment, and that the laws should be changed ($F=140.55, p < 0.001$).

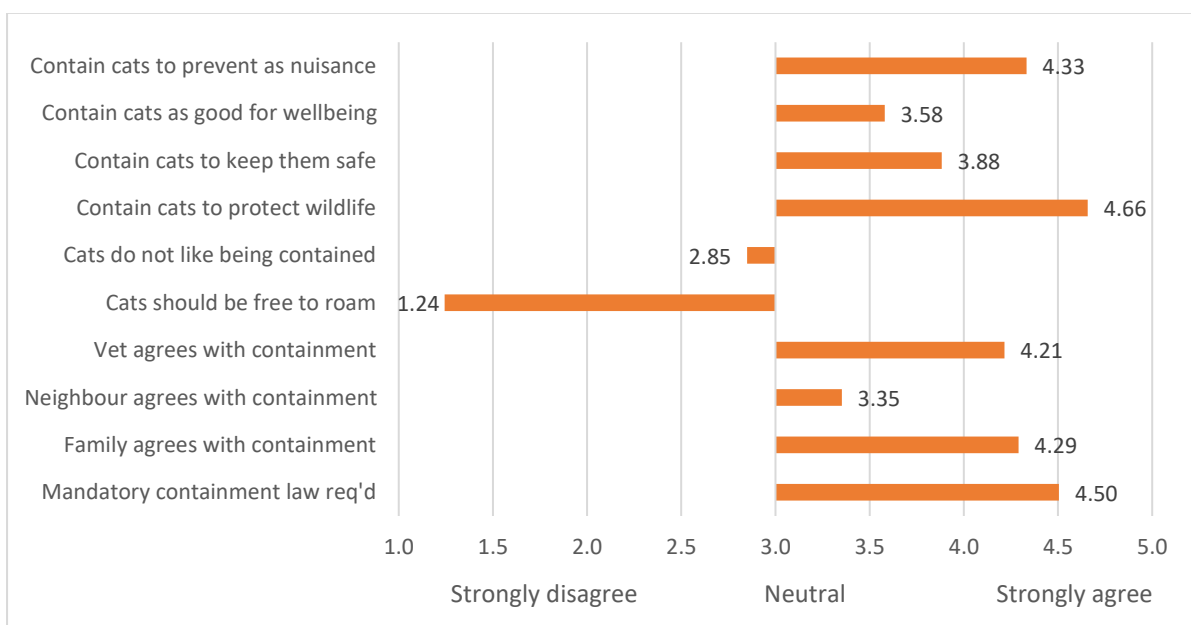


Figure BM8. Mean non-cat owner agreement scores to ten driver and barrier statements.

Key Findings (Surveys)

The adoption of responsible cat ownership behaviours across the Blue Mountains LGA is influenced by the capacity and motivation of the cat owners. Current cat owner management behaviours and identified driver and barrier factors from the public consultation are summarised below.

- Reported de-sexing rates were high but microchipping and particularly registration of cats could be improved.
- There is some support for full containment (between 31-37% adoption of indoors all the time and 21-27% restricted outdoor access). Also support for night curfews (between 28-38% adoption) with approximately 8-10% of cat owners currently allowing their cats to roam freely most of the time.
- A small number of cat owners had more than three cats in their household.
- There is a small number of residents who care for stray and unowned cats.
- Main drivers for containment were to reduce wildlife predation and keep the cat safe.
- Strong barriers to full containment were owners' perceptions of wildlife predation risks at night versus those at day and beliefs about the needs and behaviours of their cats.
- Vets were seen as important influencers for containment adoption.
- There was only weak agreement by cat owners that the introduction of cat containment legislation would motivate their compliance. Those residents that do not own cats strongly agreed with this legislation change.

Byron Shire Council

Council Interview Results

Baseline cat data

The Byron Shire Council reported they had:

- 29770 registered cats
- 31030 microchipped cats
- 12826 de-sexed cats.

Current cat management initiatives

Byron Shire Council undertakes a range of cat management initiatives. They currently limit the number of cats that could be kept per household – the Council's Local Order for the Keeping of Animals Policy states that more than two cats will not be appropriate in many situations.

This LGA also reported a night curfew policy. The Local Order for the Keeping of Animals Policy states that owners should keep their cats inside the dwelling and/or an enclosure from dusk until dawn.

The NSW Companion Animals Act 1998 allows Councils to declare Wildlife Protection Areas (WPAs). Byron Shire Council have declared three WPAs which contain public areas where cats (controlled or not) are prohibited. In addition, some estates, and new developments within this LGA have restrictive covenants, where the keeping of cats on private properties is prohibited.

The Council in partnership with Animal Farewell League, offer a subsidised de-sexing program.

Currently Byron Shire Council is an active partner in their Regional Cat Management Plan, working with the North Coast Local Land Services and other stakeholders in a range of feral cat management programs.

Compliance monitoring

As part of compliance monitoring this LGA cross-checks entries in the Companion Animal Register to access information regarding those cats not registered and / or de-sexed. Owners are contacted, advising them of the Council's requirements. If ignored penalty infringement notices are then issued. Compliance is also monitored when individual cats are either brought to their attention and / or impounded. The curfew / containment requirements are not monitored or enforced. Byron Shire does not directly monitor the WPA's however they do respond to complaints of cats within these areas when received from the public.

Information

The Byron Shire Council provides information on responsible cat ownership on their webpage and through media releases. They also conduct local school education program.

Nuisance cats

Nuisance cat complaints are investigated by the Animal Enforcement Officer, and identified owners are approached in a positive manner, providing education and encouragement to act in a more responsible manner. If the owner is unwilling, Nuisance Cat & penalty infringement notices may be issued.

Stray and feral cats

Byron LGA is currently working with the North Coast Local Land Services (the NSW Government agency in charge of implementing the regional Pest Animal Management Plan – developed under the NSW *Biosecurity Act 2015*). Stray and feral cat populations are targeted by trapping programs conducted by an outside company, Biodiversity Australia. Trapped cats taken to the animal pound and if identified as feral, transported to local vets to be euthanised.

What the Council thought was working well

When asked what is working well with their current cat management initiatives Byron replied that “nothing was working exceptionally well”. This lack in a positive response highlights the problems this LGA is currently facing with cat management, and how this project - Keeping Cats Safe at Home - will be able to assist by increasing their capacity to improve their cat management outcomes.

Challenges to effective cat management

The main challenges of cat management identified by this LGA:

- Lack of effective powers of the current NSW legislation particularly around containment
- The Council’s lack of enforcement staff.

Future intentions

Identified future cat management intentions:

- Monitoring movements of cats at night
- Restriction of cats in some areas
- Owner education and behaviour change.

Stakeholder Interview Results

Involvement in cat management

A range of stakeholders from the Byron LGA were interviewed. Their roles and activities related to cat management:

- **Mullumbimby Vet Clinic:** vaccinate, microchip, de-sex and look after unwell cats. Offer local cat welfare groups an Animal Welfare League shelter discounted de-sexing & vaccinations for their surrendered felines.
- **Lennox Head Vet, Byron Bay Wildlife Hospital:** Small animal GP, advise RPO practices to clients, wildlife vet at Byron Bay Wildlife Hospital.
- **Bangalow Vets:** Provide care for illnesses/injury and preventative treatment.
- **North Coast Branch of Animal Welfare League:** Cat and kitten adoption. Run a de-sexing assistance scheme, discounted microchipping days and operate a Cat Adoption Centre in Mullumbimby.
- **Pets for Life:** Provide cats for adoption.
- **Friends of the Koala:** Not directly involved with cat management.
- **Brunswick Valley Landcare:** Not directly involved with cat management but work around conservation and habitat for wildlife.

What stakeholders' thought was working well

Stakeholders were asked what was working well for cat management in their local LGA. The main factors identified by the stakeholders:

- The current subsidised de-sexing program (with Animal Farewell League) and free pet registration
- Provision of better information about responsible cat management to adopters of cats and kittens
- Although not best solution, Council giving free cat bibs to cat owners raises awareness.

Challenges to effective cat management

The main challenges to effective cat management identified by the stakeholders:

- The perception that cats are a low-cost pet
- People can't afford to de-sex cats resulting in unwanted kittens being dumped or surrendered
- Hoarders and abundance of stray / feral cats
- Reluctance / disagreement with cat containment practices
- Large number of older houses lacking in insect screens or other barriers to prevent cats getting outside
- Most owners believe their cat doesn't kill wildlife.

Cat management vision

Aim of cat management

Stakeholders were asked what the aim of cat management should be in their LGA. There was consensus among the stakeholders that the main aim should be to encourage cat owners to be responsible – that is to de-sex and keep cats contained in house and enclosures at least at night but preferably during day as well.

Required information and actions

Stakeholders were asked what information and actions are required to manage cats more effectively in their local LGA. Their responses:

- Positive message framing outlining the benefits to cats and cat owners of keeping cats at home and assistance with strategies and options for renters to be able to attach temporary structures without damaging the property.
- Show the public examples of how containment (cat enclosures) can work.
- Advice from cat specialists
- GPS tracking of pet cats to demonstrate where they go.
- More de-sexing and education campaigns.
- Subsidised de-sexing for people of modest means/ pensioners.
- Enforcement of Companion Animal Regulations to do with microchipping and registration.
- New legislation to enforce cat containment.

How to deal with conflict

Stakeholders were asked about the best ways to deal with conflicts that arise around cat management in their communities. Their suggestions:

- Have an honest and informed discussion about why it is necessary to reduce cat impacts on native animal populations.
- Don't just tell people what they should do.
- Frame messaging around keeping cats safe.
- Council and organisations working together, hopefully having new legislation to support them.

Key Findings (Interviews)

How domestic cat management is being handled is influenced by the capacity and motivation of both the Council and the community. The main benefits of current programs and challenges for the Byron Shire LGA are summarised below.

- Subsidised de-sexing program run in conjunction with the Animal Farewell League and free pet registration have been beneficial. This needs to be boosted as still many owners can't afford to de-sex cats.
- There is a need to provide better information about responsible cat management, along with effective behaviour change strategies.
- Hoarders and effective rehoming of surrendered animals need addressing.
- Continued cooperation with other agencies on addressing the populations of stray and feral cats.
- There is a reluctance and disagreement about cat containment practices. Strengthening the current legislation would add clarity.
- Staffing issues within Councils needs to be addressed.

Phone survey

Respondent demographics

Byron Shire was one of the LGAs to be targeted with the phone survey. Thirty-eight responses were collected. Nearly three-quarters of respondents (71%) were female the remaining 29% were male. The average age of respondents was 58 years.

When asked to describe their locality, 25 (66%) indicated they lived in a town, four (11%) as semi-rural, and nine (24%) as rural. Most of the respondents (n=34, 89%) lived in a house with a medium to large outdoor space (yard). Two (5%) lived in a house with only a small outside space (courtyard or small garden). One (3%) lived in a semi-detached house or townhouse with only a small outside space (courtyard or small garden), and one (3%) lived in a flat or unit with some outside space (patio or balcony). Most of the respondents indicated they owned their dwelling (n=35, 92%) and three were renting (8%).

Adoption of responsible cat ownership behaviours

The majority of respondents (n=32, 84%) had one cat in their household, five (13%) owned two cats, and one owned three cats.

De-sexing rates were high with all respondents reporting their cats were de-sexed.

Microchipping rates were lower at 87%, with one respondent unsure. Registration with the local council was lower again at 61%, although seven (18%) of owners were unsure if their cats were registered.

Keeping cats indoors at night but letting them roam freely during the day was the most common cat living arrangement (n=13, 34%). The next most popular arrangement was keeping cats indoors all the time (n=10, 26%). Seven respondents (18%) allowed their cat indoors and restricted their outdoor access (e.g. in an escape-proof yard / run, or on a lead), and seven (18%) let their cat indoors and allowed them to roam free when outside. Only one respondent had a cat that lived outside all the time.

Of the respondents who allowed their cats to roam freely outside (n=21), 19 (90%) indicated that their cat would be likely to some extent be roaming freely in the morning (6am-noon), 18 (86%) indicated that their cat would be likely to some extent be roaming freely in the afternoon (noon-6pm), 12 (57%) indicated that their cat would be likely to some extent be roaming freely in the evening (6pm-midnight), while nine (43%) indicated that their cat would be likely to some extent be roaming freely from midnight to dawn.

The respondents who allowed their cats to roam freely outside were asked about their future intentions of preventing their cats from roaming freely. Results are presented in Figure B1. In the future respondents were more likely to prevent their cat from roaming more often than they do currently (mean 1.4 where 1= extremely unlikely and 5= extremely likely) than to prevent it roaming freely all the time (mean 1.3) or install a fence or enclosure (mean 1.0).

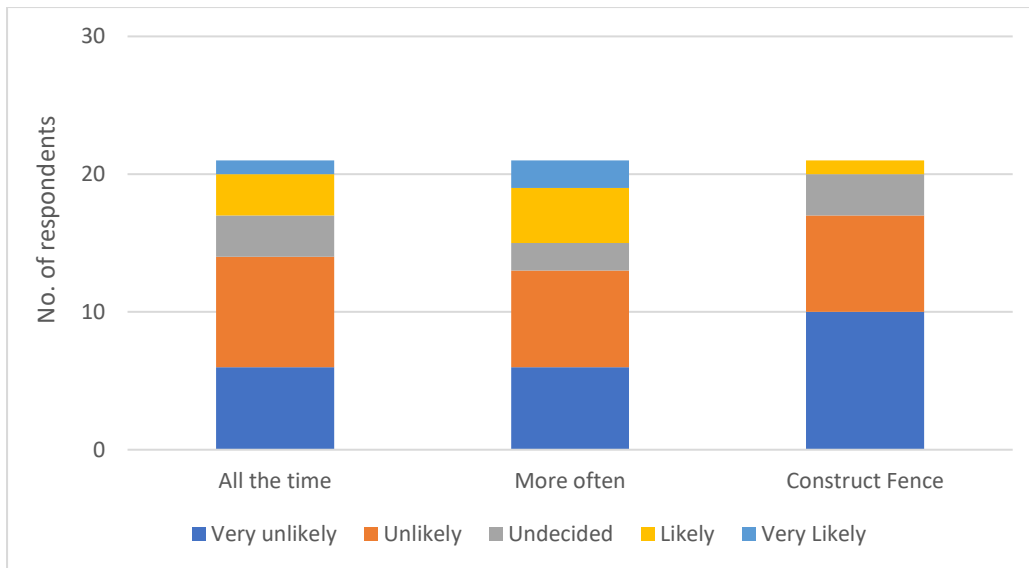


Figure B1. Likelihood of preventing free roaming of cats in the future across Byron LGA.

Drivers and barriers to cat containment

Respondents were given the opportunity in an open-ended format to list at least three factors they have considered when deciding whether to allow their cat to roam freely or not. All respondents listed at least one factor. The main factors listed by the respondents when preventing their cat from roaming freely are shown in Figure B2. Protecting wildlife, including small mammals, birds, and reptiles, was the most popular response. Avoiding fighting with other cats and preventing traffic accidents were the next common responses.

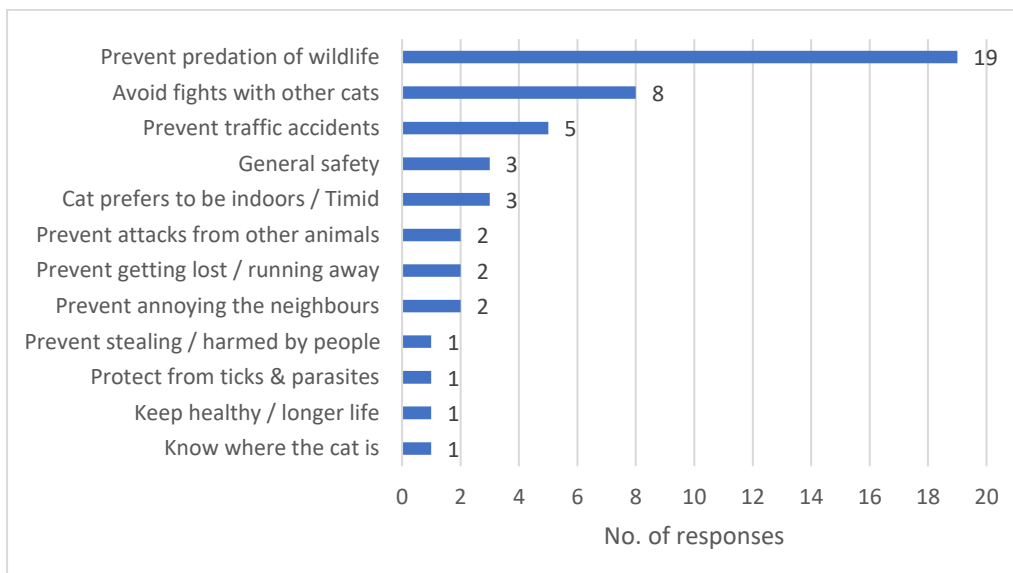


Figure B2. Main factors considered by respondents when preventing their cat from roaming freely.

The listed factors considered by respondents when deciding to allow their cat to roam freely are shown in Figure B3. The consideration that their cat doesn't roam very far from their property and whether the cat was new to the area were the top two responses.

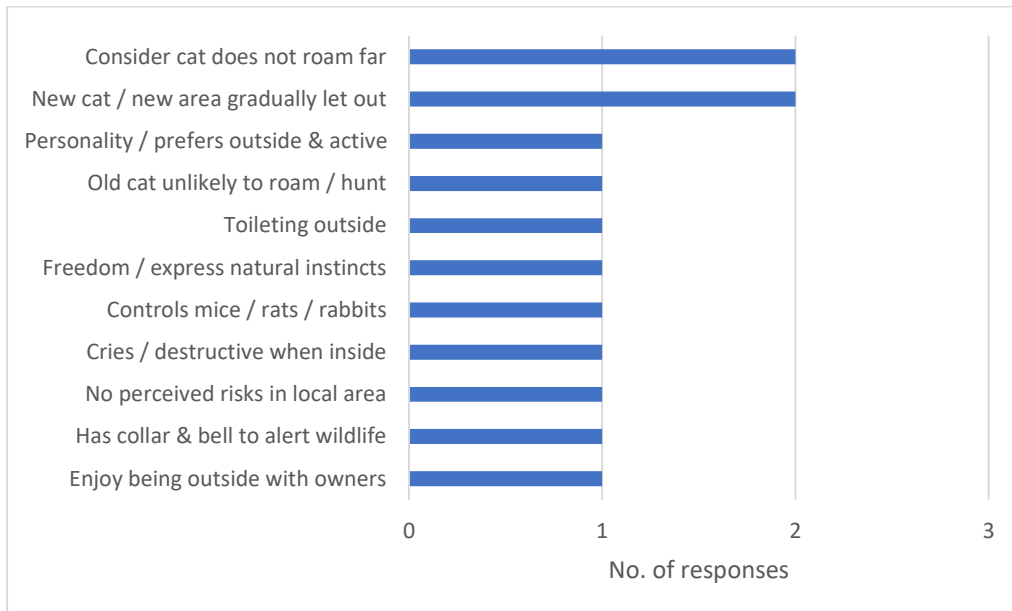


Figure B3. Main factors considered by respondents when deciding to allow their cat to roam freely.

After listing their own considerations, respondents were then asked to rate their agreement with 14 statements pertaining to previously identified drivers of and barriers to preventing cats from roaming freely (See Q5 in Appendix 4). The average ratings are summarised in Figure B4.

Most respondents were confident they could prevent their cat from roaming if they wished to, and they could provide everything to ensure their cat was happy. Most respondents disagreed that their current living circumstances made it difficult to prevent their cat from roaming.

There were no statistical differences in this agreement rating and respondent's type of dwelling ($F=1.28, p=0.30$), locality ($F=0.46, p=0.64$) or own / rent situation ($F=0.23, p=0.64$).

Wildlife protection and keeping cats safe were strongest drivers of cat containment. This corresponds with the results from the open-ended question (Figure B2). On average respondents disagreed that cats should be free to roam, however there were differences between those owners who currently restrict their cat's movements (Inside all the time 1.50, Inside & restricted outside 1.57), practice a night curfew (1.87) or let their cats roam freely (Free outside all the time 4.00, Inside & free outside 2.71). Owing to the small, unequal sample sizes these differences could not be statistically compared.

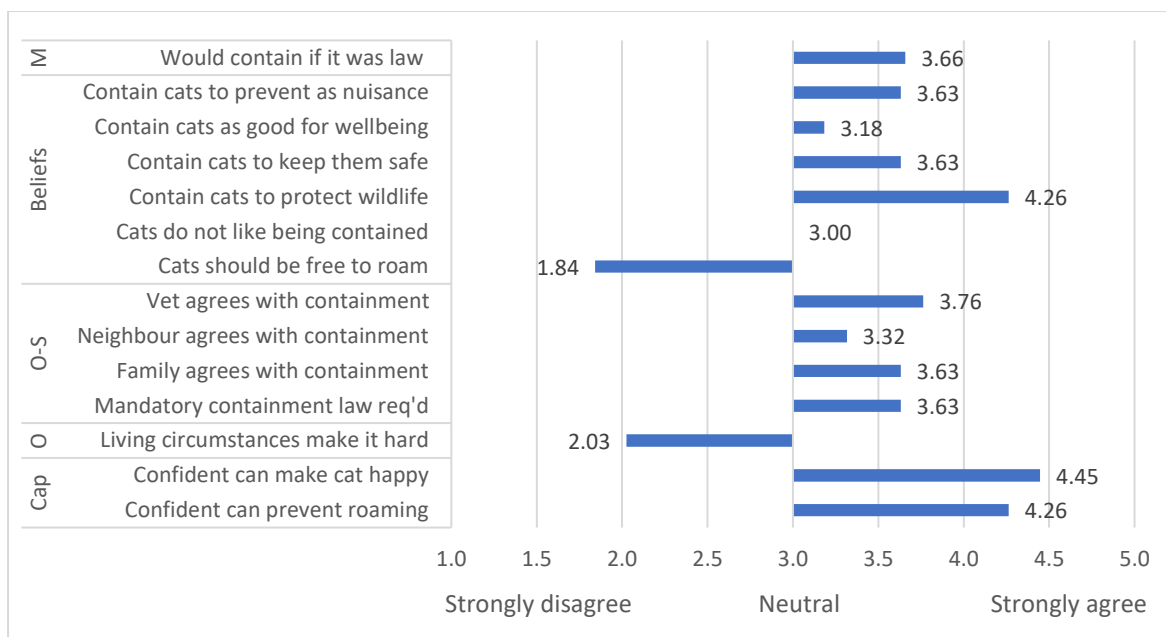


Figure B4. Mean agreement scores to the 14 driver and barrier statements (Cap=Individual capability factors, O=Physical opportunity factor, O-S=Social opportunity factors, Beliefs=Internal motivational factors, M=External motivational factor).

Online survey

Respondent demographics

- 281 respondents completed the online survey – 69 (25%) were cat owners and 212 (75%) did not own a cat.
- Most cat owners were female (60, 87%), with six males (9%). One cat owner identified as non-binary, and two did not answer this question.
- Most non-cat owners were also female (124, 58%), with 75 males (35%) and 13 non-responses.
- The overall average age was 58.5 years (± 12.7). The average age for cat owners was younger – 51.7 years (± 12.9), and non-cat owners was slightly older – 60.9 years (± 11.7).

Cat ownership behaviours

The majority of respondents (n=42, 62%) had one cat in their household, 23 (34%) owned two cats, and one each owned three, four and five cats respectively.

Keeping cats indoors at night but letting them roam freely during the day was the most common cat living arrangement (n=32, 47%). The next most popular arrangements were allowing cats indoors and restricting their outdoor access (n=16, 24%) and keeping cats indoors all the time (n=14, 21%). Six respondents (9%) let their cat indoors and allowed them to roam free when outside. No respondents had a cat that lived outside all the time.

Feeding of free roaming cats

Respondents were asked if they cared for any free-roaming cats that were not their own. Six respondents indicated they did care for unowned free-roaming cats - three cat owners (4%) and three non-cat owners (1%).

Drivers and barriers to cat containment

Cat owners were given the opportunity in an open-ended format to list the factors they have considered when deciding whether to allow their cat to roam freely or not. At least one factor was listed by 61 (88%) of cat owners. The main factors listed by the respondents when preventing their cat from roaming freely are shown in Figure B5. Protecting wildlife, including small mammals, birds, and reptiles, was the most popular response. General cat safety, preventing attacks from other animals, mainly dogs and snakes, were the next popular.

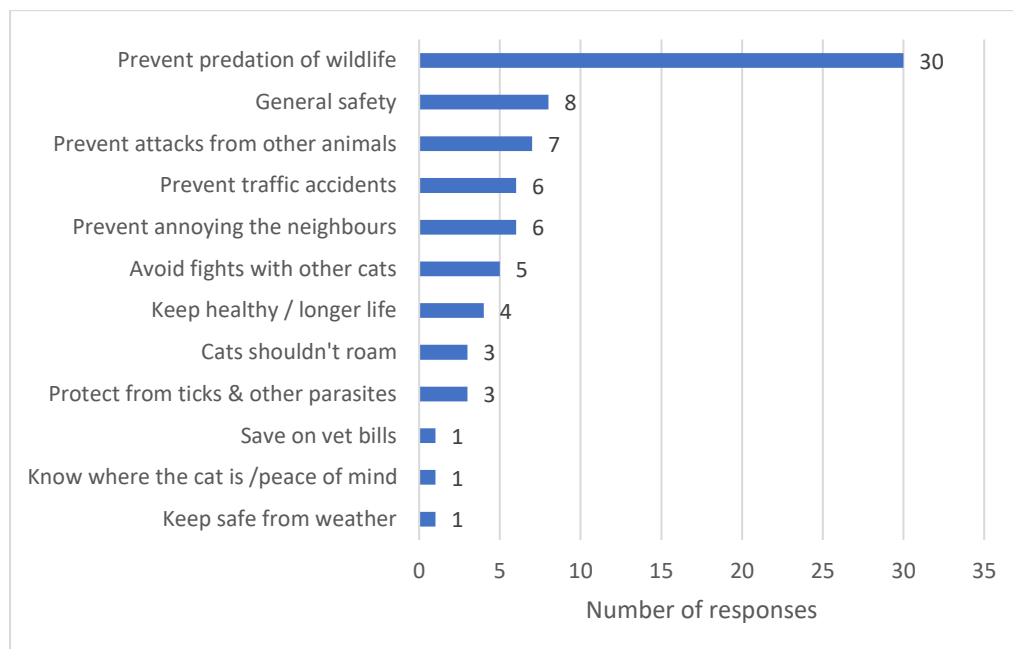


Figure B5. Main factors considered by cat owners when preventing their cat from roaming freely.

The listed factors considered by cat owners when deciding to allow their cat to roam freely are shown in Figure B6. The top response was the time of day – cats should be prevented from roaming at night it was OK during the day. The next popular response was the owners' perception that their cat doesn't roam very far from their property.

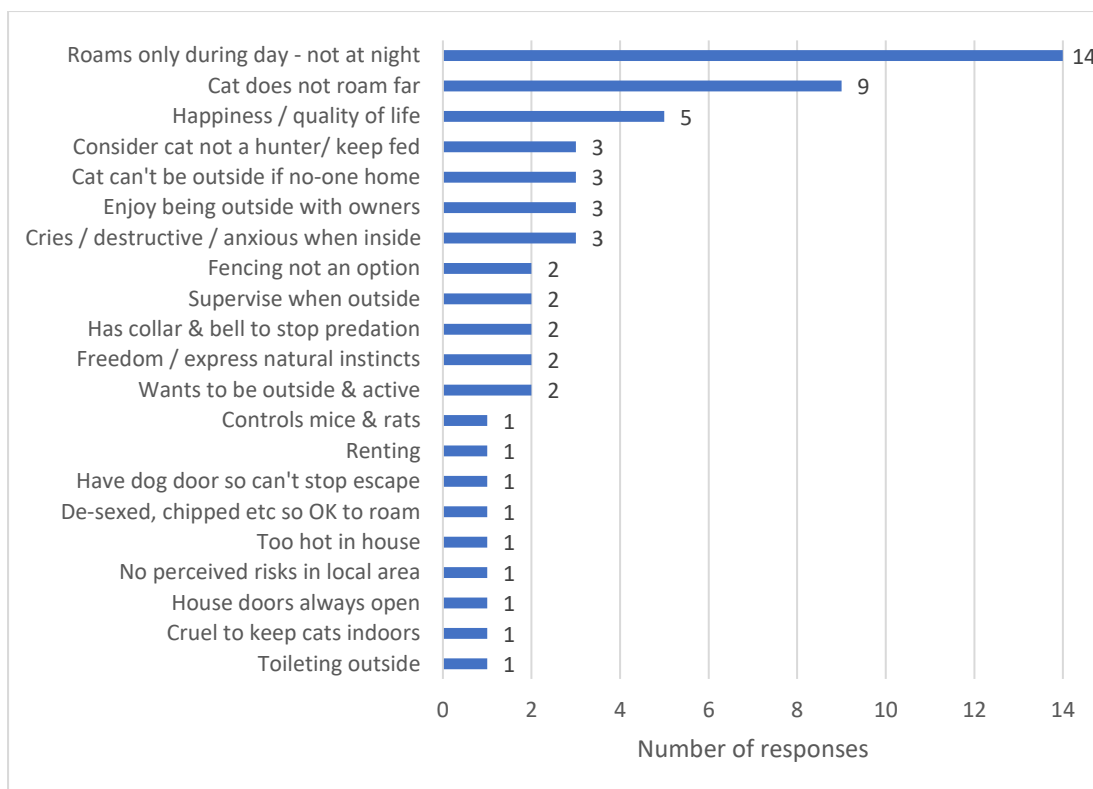


Figure B6. Main factors considered by cat owners when deciding to allow their cat to roam freely.

After listing their own considerations, cat owners were then asked to rate their agreement with 15 statements pertaining to previously identified drivers of and barriers to preventing cats from roaming freely (See Q7 in Appendix 5). The average ratings are summarised in Figure B7.

Online respondents were not as confident they could prevent their cat from roaming if they wished to, or they could provide everything to ensure their cat was happy as the phone survey respondents. Most respondents disagreed that their current living circumstances made it difficult to prevent their cat from roaming. There were no statistical differences in this agreement rating and respondent's type of dwelling ($F=1.24, p=0.30$) or own / rent situation ($F=0.78, p=0.46$).

Protecting wildlife was the strongest driver of cat containment. This corresponds with the results from the open-ended question (Figure B5). On average respondents disagreed that cats should be free to roam, however there were statistical differences ($F=6.37, p<0.001$) between those owners who currently restrict their cat's movements (Inside all the time 1.36, Inside & restricted outside 1.56), practice a night curfew (2.06) or let their cats roam freely (Inside & free outside 3.00).

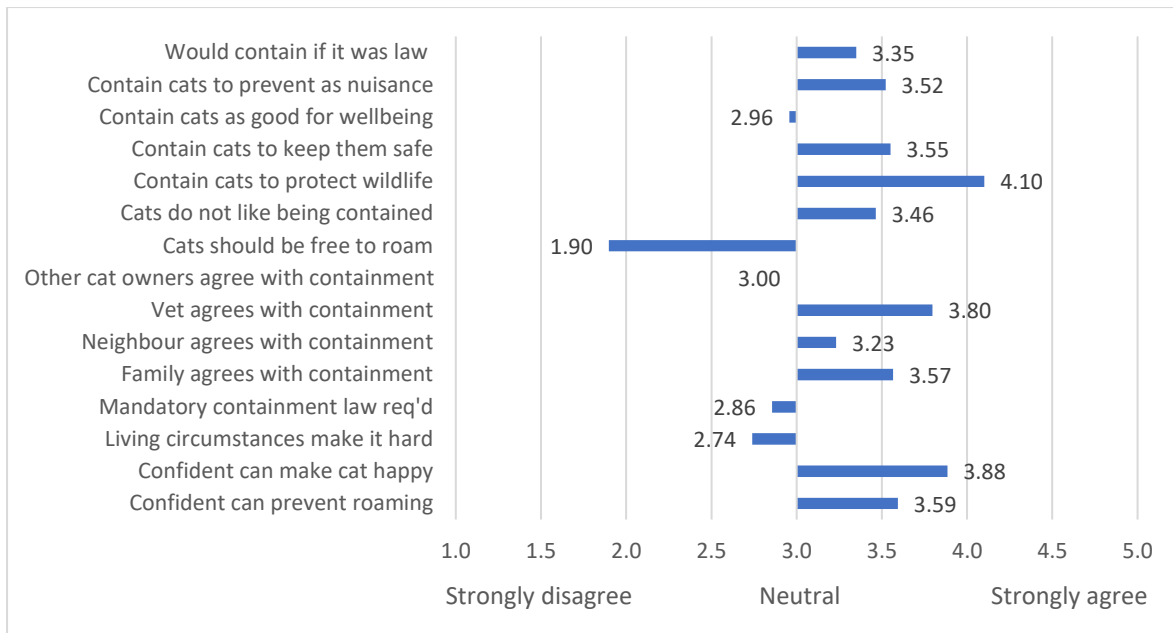


Figure B7. Mean agreement scores to the 15 driver and barrier statements.

Those respondents who did not own cats were also to rate their agreement with 10 statements pertaining to previously identified drivers of and barriers to preventing cats from roaming freely. The average ratings are shown in Figure B8. There were statistical differences between the ratings of cat owners and non-owners for seven of the ten shared statements. Those respondents who do not own cats were more likely to agree that cats should be prevented from roaming to prevent them being a nuisance ($F=14.48, p < 0.001$) and to improve the cat's well-being ($F=5.00, p=0.03$). They were less likely to agree that cats should be free to roam ($F=38.09, p < 0.001$) and that cats do not like to be contained ($F=4.88, p=0.03$). These respondents were more likely to agree that their family ($F=26.59, p < 0.001$) and neighbours ($F=6.08, p=0.01$) supported cat containment, and laws should be changed ($F=98.49, p < 0.001$).

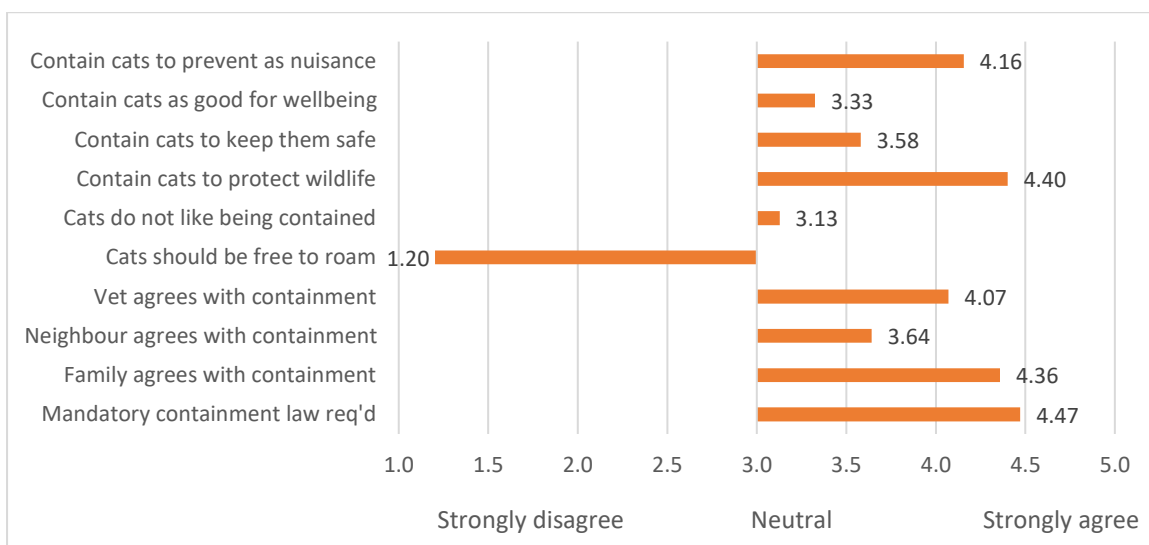


Figure B8. Mean non-cat owner agreement scores to ten driver and barrier statements

Key Findings (Surveys)

The adoption of responsible cat ownership behaviours across the Byron LGA is influenced by the capacity and motivation of the cat owners. Current cat owner management behaviours and identified driver and barrier factors from the public consultation are summarised below.

- Reported de-sexing rates were relatively high but microchipping and registration of cats need to be improved.
- There is some support for night curfews (between 34-47% adoption), however support for full containment is lower (between 21-26% adoption of indoors all the time and 18-24% restricted outdoor access) and needs to be encouraged. Around 9-18% of cat owners pose no restrictions on their cats' movements.
- There is a small number of residents who care for stray and unowned cats.
- Main drivers for containment were to reduce wildlife predation and keep the cat safe.
- Strong barriers to full containment were owners' perceptions of the wildlife predation risks at night versus those at day and beliefs about the behaviour and needs of their cats.
- Family members and vets were seen as potential important influencers for containment adoption.
- There was weak agreement by cat owners that cat containment legislation was needed. If introduced cat owners only moderately agreed that it would motivate their compliance. Those residents that do not own cats strongly agreed with the legislation change.

Campbelltown City Council

Council Interview Results

Baseline cat data

The Campbelltown City Council reported they had:

- 990 microchipped cats from July 2020 to June 2021

The number of registered cats and de-sexed cats were unknown.

Current cat management initiatives

Campbelltown City Council undertakes a range of cat management initiatives. They offer subsidised de-sexing and microchipping programs, and strongly recommend cat containment as part of 'responsible cat ownership'. This LGA currently has no declared Wildlife Protection Areas (WPAs).

Compliance monitoring

Campbelltown does not cross-check entries in the Companion Animal Register to access information regarding those cats not registered and / or de-sexed within their LGA.

Information

This Council hands out the Cat Protection Society 'good neighbour project' brochure and provides responsible cat ownership information on their website.

Nuisance cats

The Council's compliance section notes the nuisance cat complaints and depending on the severity, sends a ranger to ascertain the issue. If owners of nuisance cats cannot be found, they are accepted at the Animal Care Facility.

Stray and feral cats

Stray and feral cats pose issues in all parts of the LGA, around schools, playgrounds, food services and out in our rural suburbs. No current management programs are conducted.

What the Council thought was working well

The Council could not name anything that was currently working well with their cat management initiatives, highlighting how this project - Keeping Cats Safe at Home - will be of great assistance in improving their cat management outcomes.

Challenges to effective cat management

The main challenges of cat management identified by this LGA:

- Large populations of unowned, stray and feral cats
- People who do not de-sex cats
- Cats left behind by owners when they move
- Public appear to want everything for free
- The difficulty in changing the culture of cat owners.

Future intentions

Identified future cat management intentions:

- More funding for de-sexing and microchipping programs along with access to a mobile service
- More action by Council to create WPAs and curfew / containment policy
- TNR programs for cat colonies.

Stakeholder Interview Results

Involvement in cat management

Only one stakeholder from the Campbelltown LGA was interviewed. This was a community member whose activities related to cat management was to help save the wildlife and bushlands.

What stakeholders' thought was working well

The stakeholder thought the de-sexing programs were working well for cat management in the Campbelltown LGA.

Challenges to effective cat management

The main challenges to effective cat management identified by the stakeholder:

- Cat owners who believe containing cats inside the house is detrimental to the cat
- Cat feeders who maintain wild cat colonies
- Too many stray / feral cats breeding and people dumping kittens
- Legislation needs to be tougher.

Cat management vision

Aim of cat management

The stakeholder believed the aims of cat management should be to educate cat owners to be more responsible, and that cats should be de-sexed and prevented from roaming at least during the night.

Required information and actions

The information and actions required to manage cats more effectively in the Campbelltown local LGA:

- Change of legislation to contain cats at least during the night
- Education campaigns about how indoor style living is not bad for cats
- Financial incentives for cat owners to keep their cats inside the home
- Subsidies to de-sex cats and build cat runs
- A phone hotline or app so neighbours can do in cats roaming free and help council to enforce the law
- Real stories from wildlife carers of wild animals which have been harmed by cats.

How to deal with conflict

The stakeholder had no suggestions about the best ways to deal with conflicts that arise around cat management in their communities.

Key Findings (Interviews)

How domestic cat management is being handled is influenced by the capacity and motivation of both the Council and the community. The main benefits of current programs and challenges for the Blue Mountains LGA are summarised below.

- De-sexing and microchipping programs beneficial but more funding and improved access required.
- Effective behaviour change strategies required to target particular issues such as cat containment and dumping of cats.
- Large populations of unowned, stray or feral cats. Maybe trial TNR programs for cat colonies.
- More action by Council to create WPAs and curfew / containment policy.

Phone survey

Respondent demographics

Campbelltown City Council was one of the LGAs to be targeted with the phone survey. One hundred and fifty-nine responses were collected. Most of respondents (n=123, 77%) were female the remaining 23% were male. The average age of respondents was 56.0 years.

When asked to describe their locality, nine (6%) indicated they lived in a city, 129 (81%) indicated they lived in a suburb, 17 (11%) as semi-rural, and three (2%) as rural. Most of the respondents (n=131, 82%) lived in a house with a medium to large outdoor space (yard). Ten (6%) lived in a house with only a small outside space (courtyard or small garden). Six (4%) lived in a semi-detached house or townhouse with a garden, five (3%) lived in a semi-detached house or townhouse with only a small outside space (courtyard or small garden), and a further five (3%) lived in a flat. Two described their dwelling as 'other'. Most of the respondents indicated they owned their dwelling (n=117, 74%), 39 were renting (25%) and three (2%) had 'other' arrangements.

Adoption of responsible cat ownership behaviours

Ninety-two respondents (58%) had one cat in their household, 38 (24%) owned two cats, 17 (11%) owned three cats, six (4%) owned four cats and the remaining four (4%) indicated they owned more than four cats. Two of these respondents reported having eight cats in their household.

De-sexing rates were relatively high with 148 (93%) respondents reporting their cats were de-sexed, one respondent was unsure. Microchipping rates were a lower at 88%, with three

respondents unsure. Registration with the local council was lower again at 74%, although ten owners were unsure if their cats were registered.

Keeping cats indoors at all times was the most common cat living arrangement (n=58, 36%). The next most popular arrangement was keeping cats indoors at night but allowing them to roam freely during the day (n=48, 30%). Twenty-eight respondents (18%) allowed their cat indoors and restricted their outdoor access (e.g. in an escape-proof yard / run, or on a lead), and sixteen (10%) let their cat indoors and allowed them to roam free when outside. Nine respondents (6%) reported that their cat lived outside all the time.

Of the respondents who allowed their cats to roam freely outside (n=73), 70 (96%) indicated that their cat would be likely to some extent be roaming freely in the morning (6am-noon) as well as in the afternoon (noon-6pm). Thirty-three (45%) indicated that their cat would be likely to some extent be roaming freely in the evening (6pm-midnight), and 25 (34%) indicated that their cat would be likely to some extent be roaming freely from midnight to dawn.

The respondents who allowed their cats to roam freely outside were asked about their future intentions of preventing their cats from roaming freely. Results are presented in Figure C1. In the future respondents were more likely to prevent their cat from roaming freely all the time (mean 1.2 where 1= extremely unlikely and 5= extremely likely) and more often than they do currently (mean 1.2) than to install a fence or enclosure (mean 1.1).

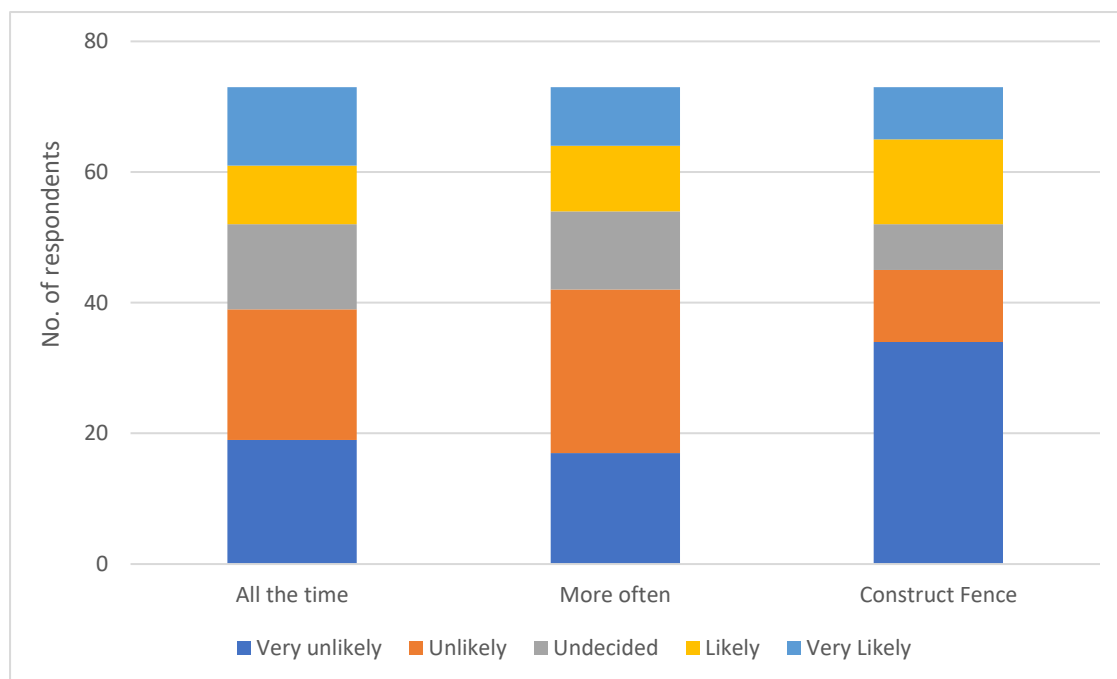


Figure C1. Likelihood of preventing free roaming of cats in the future across Campbelltown LGA.

Drivers and barriers to cat containment

Respondents were given the opportunity in an open-ended format to list at least three factors they have considered when deciding whether to allow their cat to roam freely or not. At least one factor was listed by 157 (99%) of respondents. The main factors listed by the respondents when preventing their cat from roaming freely are shown in Figure C2. Protecting wildlife, including small mammals, koalas, birds, and reptiles, was the most popular response. General safety and preventing traffic accidents were the next popular.

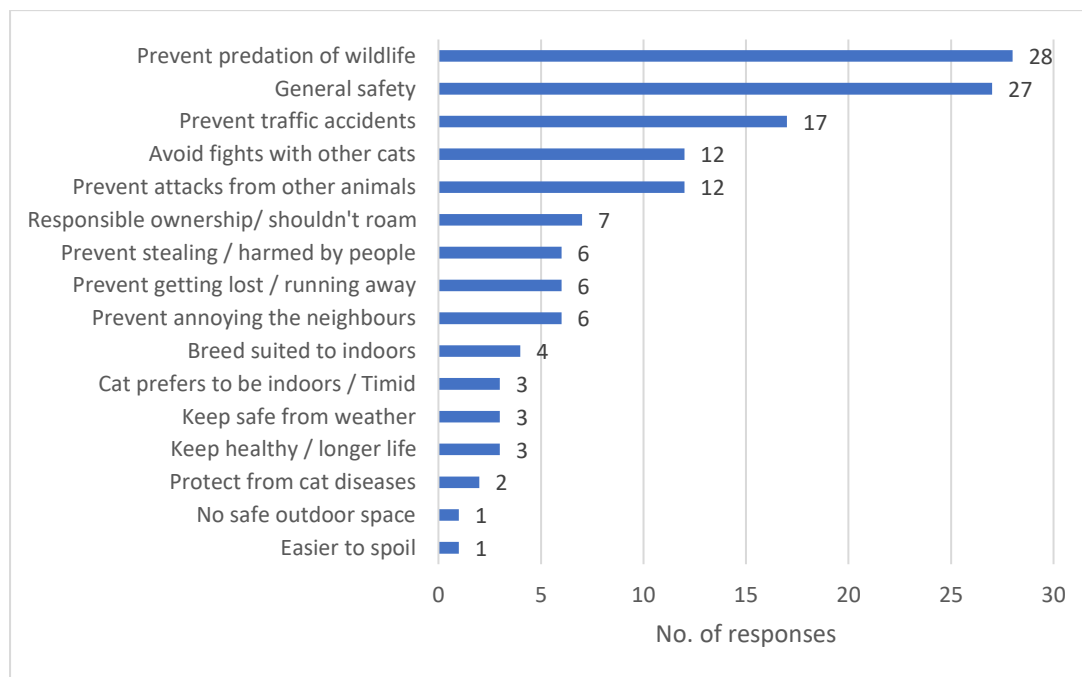


Figure C2. Main factors considered by respondents when preventing their cat from roaming freely.

The listed factors considered by respondents when deciding to allow their cat to roam freely are shown in Figure C3. The top response was that the cat owners do not consider any factors. The perception that their cat doesn't roam very far from their property and that their cat preferred to be outside were the next most popular considerations.

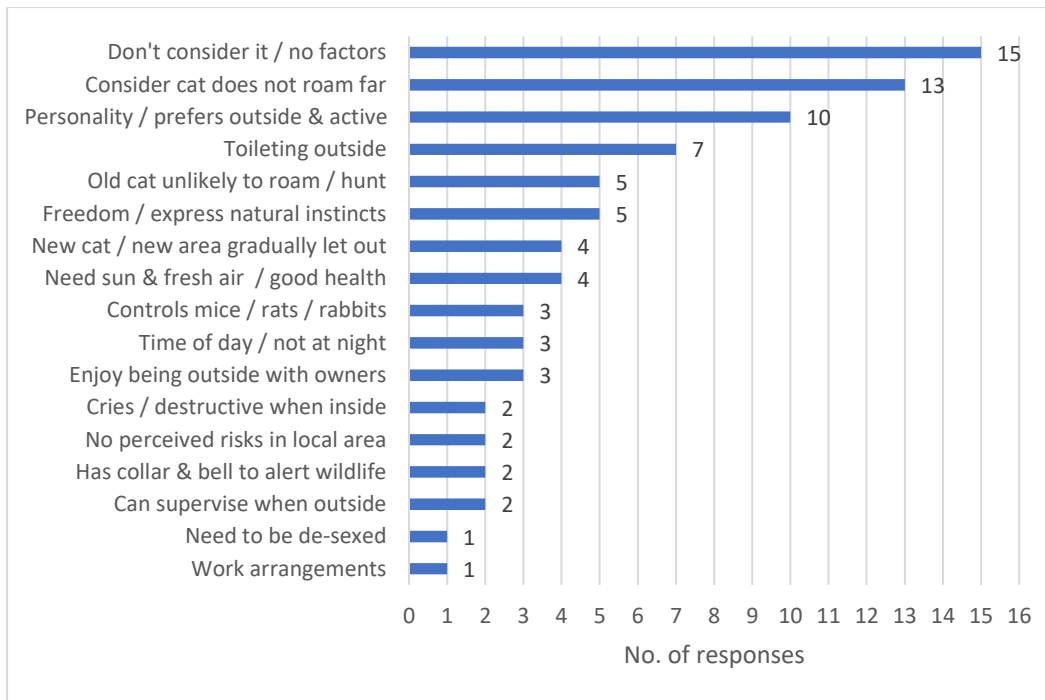


Figure C3. Main factors considered by respondents when deciding to allow their cat to roam freely.

After listing their own considerations, respondents were then asked to rate their agreement with 14 statements pertaining to previously identified drivers of and barriers to preventing cats from roaming freely (See Q5 in Appendix 4). The average ratings are summarised in Figure C4.

Most respondents were confident they could prevent their cat from roaming if they wished to, and they could provide everything to ensure their cat was happy. Most respondents disagreed that their current living circumstances made it difficult to prevent their cat from roaming. There were no statistical differences in this agreement rating and respondent's type of dwelling ($F=0.87, p=0.55$), locality ($F=0.19, p=0.94$) or own / rent situation ($F=0.07, p=0.93$).

Wildlife protection and keeping cats safe were strongest drivers of cat containment. This corresponds with the results from the open-ended question (Figure C2). On average respondents disagreed that cats should be free to roam, however there were statistical differences ($F=13.63, p<0.001$) between those owners who currently restrict their cat's movements (Inside all the time 1.70, Inside & restricted outside 1.70), practice a night curfew (2.26) or let their cats roam freely (Free outside all the time 2.56, Inside & free outside 2.78).

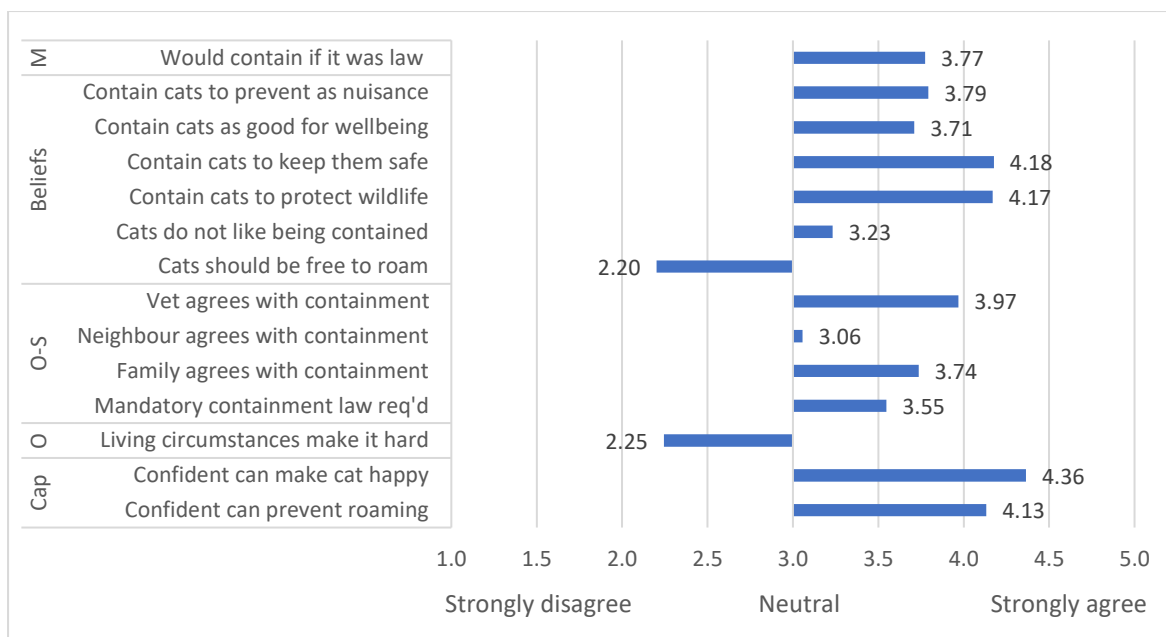


Figure C4. Mean agreement scores to the 14 driver and barrier statements (Cap=Individual capability factors, O=Physical opportunity factor, O-S=Social opportunity factors, Beliefs=Internal motivational factors, M=External motivational factor).

Online survey

Respondent demographics

- 515 respondents completed the online survey – 291 (57%) were cat owners and 224 (43%) did not own a cat.
- Most cat owners were female (244, 84%), with 36 males (12%). Three cat owners identified as non-binary, and 8 did not answer this question.
- Most non-cat owners were also female (161, 72%), with 54 males (24%), two non-binary and 7 non-responses.
- The overall average age was 43.1 years (± 13.1). The average age for cat owners was slightly younger – 42.1 years (± 13.3), and non-cat owners was slightly older – 44.4 years (± 12.7).

Cat ownership behaviours

The majority of respondents ($n=128$, 44%) had one cat in their household, 88 (30%) owned two cats, 32 (11%) owned three cats and 14 (5%) owned four cats. The remaining 10% owned five cats or more, with four households reporting they owned eleven cats each.

Keeping cats indoors all the time was the most popular cat living arrangement ($n=118$, 41%). The next most popular arrangement was keeping cats indoors with restricted outdoor access (e.g. in an escape-proof yard / run, or on a lead) ($n=95$, 33%). Forty-six respondents kept their cats indoors at night but let them roam freely during the day (16%) and twenty-nine (10%) let their cat indoors and allowed them to roam free when outside. Three respondents reported that their cat lived outside all the time.

Feeding of free roaming cats

Fifty-seven cat owners (20%) and fifteen non-cat owners (7%) indicated they had cared for unowned free-roaming cats.

Drivers and barriers to cat containment

Cat owners were given the opportunity in an open-ended format to list the factors they have considered when deciding whether to allow their cat to roam freely or not. At least one factor was listed by 273 (94%) of cat owners. The main factors listed by the respondents when preventing their cat from roaming freely are shown in Figure C5. Protecting wildlife, including small mammals, birds, and reptiles, was the most popular response. Preventing traffic accidents, general safety and preventing attacks from other animals, mainly dogs, were the next popular.

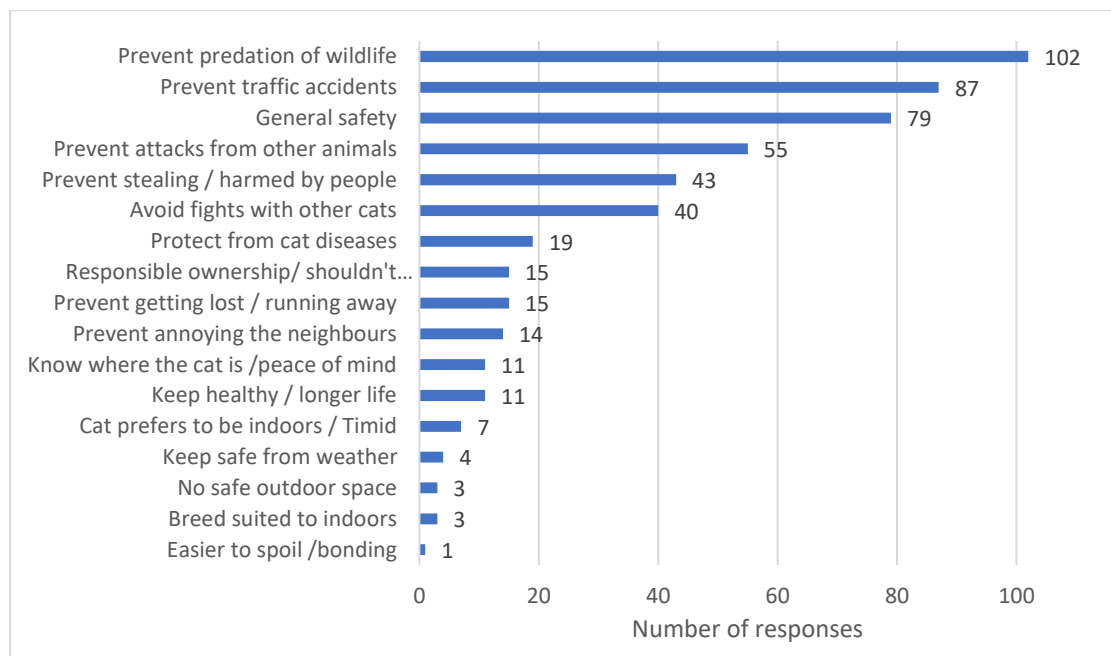


Figure C5. Main factors considered by cat owners when preventing their cat from roaming freely.

The listed factors considered by cat owners when deciding to allow their cat to roam freely are shown in Figure C6. The top response was that their cat preferred to be outside and active. The next popular response was the time of day – cats should be prevented from roaming at night it was OK during the day. The perception that their cat doesn't roam very far from their property and that it was Ok for their cat to roam if it was desexed and / or microchipped were next most popular considerations.

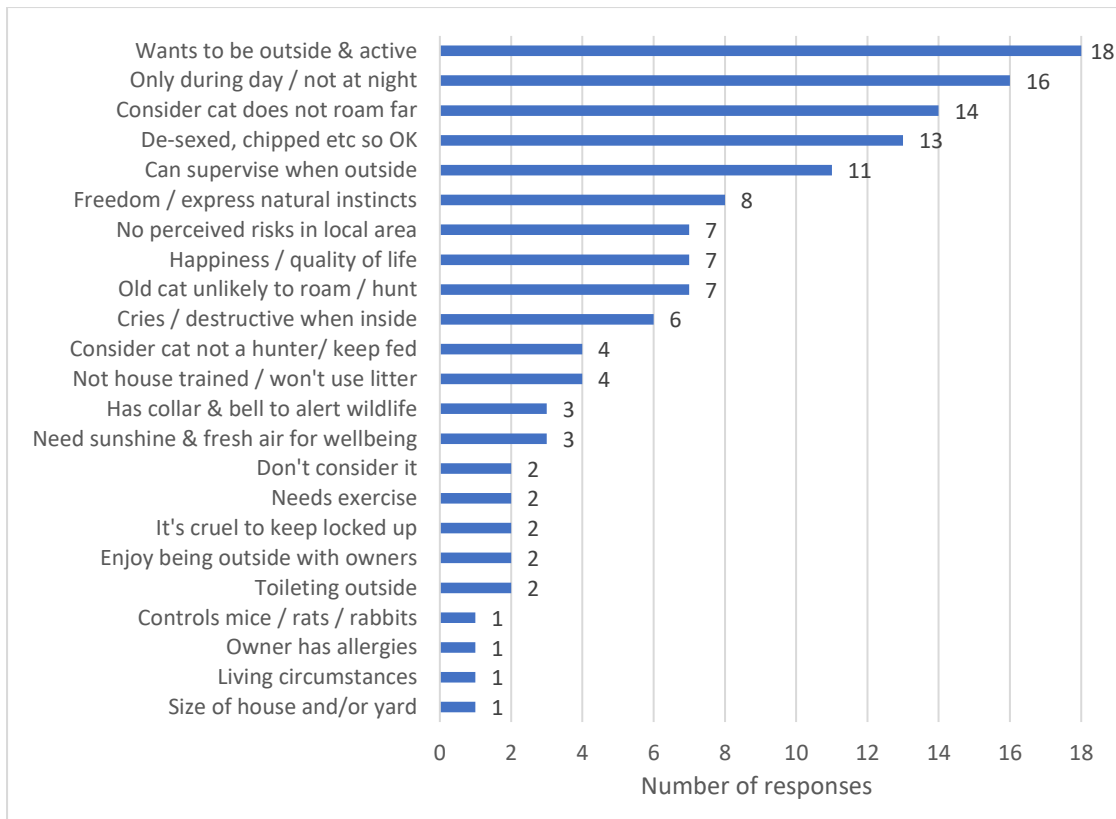


Figure C6. Main factors considered by cat owners when deciding to allow their cat to roam freely.

After listing their own considerations, cat owners were then asked to rate their agreement with 15 statements pertaining to previously identified drivers of and barriers to preventing cats from roaming freely (See Q7 in Appendix 5). The average ratings are summarised in Figure C7.

Like the phone survey, most respondents were confident they could prevent their cat from roaming if they wished to, and they could provide everything to ensure their cat was happy. Most respondents disagreed that their current living circumstances made it difficult to prevent their cat from roaming. There were no statistical differences in this agreement rating and respondent's type of dwelling ($F=1.21, p=0.30$) or own / rent situation ($F=1.18, p=0.31$).

Keeping cats safe and protecting wildlife were the strongest drivers of cat containment. This corresponds with the results from the open-ended question (Figure C5). On average respondents disagreed that cats should be free to roam, however there were statistical differences ($F=29.25, p<0.001$) between those owners who currently restrict their cat's movements (Inside all the time 1.70, Inside & restricted outside 1.71), practice a night curfew (3.07) or let their cats roam freely (Inside & free outside 3.45, Free outside all the time 3.67).

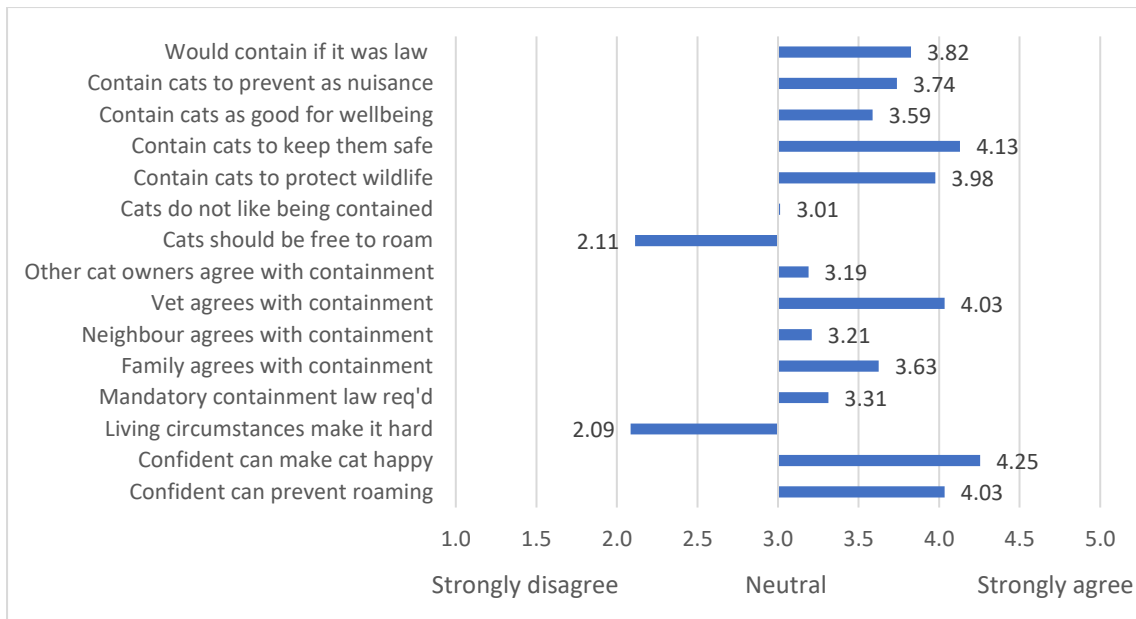


Figure C7. Mean cat owner agreement scores to the 15 driver and barrier statements.

Those respondents who did not own cats were also to rate their agreement with 10 statements pertaining to previously identified drivers of and barriers to preventing cats from roaming freely. The average ratings are shown in Figure C8. There were statistical differences between the ratings of cat owners and non-owners for seven of the ten shared statements. Those respondents who do not own cats were more likely to agree that cats should be prevented from roaming to protect wildlife ($F=41.78, p < 0.001$), to prevent them being a nuisance ($F=50.46, p < 0.001$) and to improve the cat's well-being ($F=4.79, p=0.03$). They were less likely to agree that cats should be free to roam ($F=87.57, p < 0.001$). These respondents also were more likely to agree that their family ($F=57.32, p < 0.001$) and neighbours ($F=19.52, p < 0.001$) agreed with cat containment, and that the laws should be changed ($F=111.21, p < 0.001$).

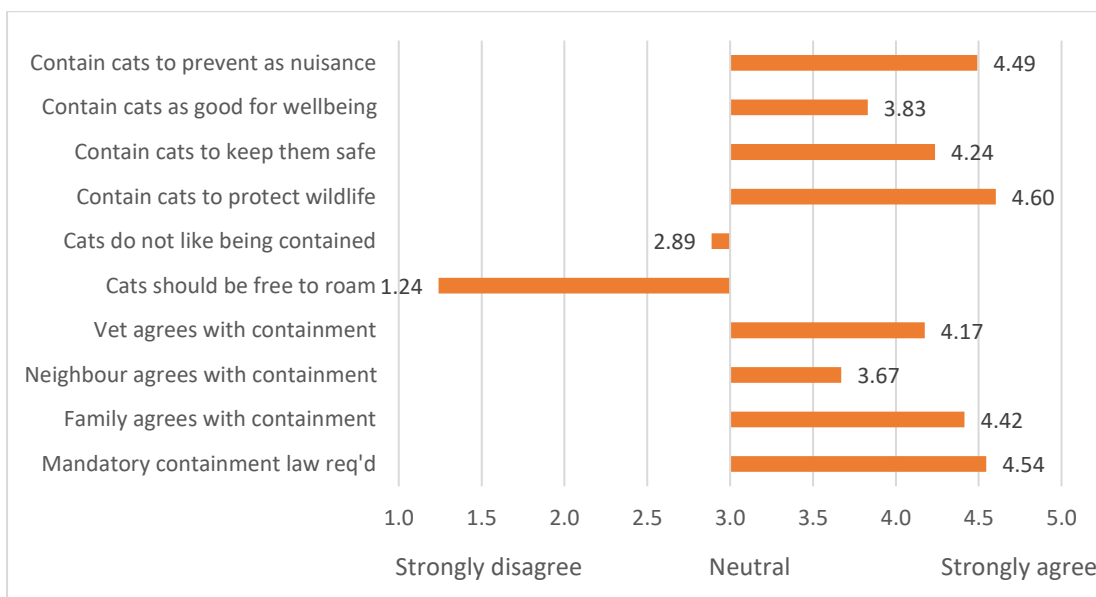


Figure C8. Mean non-cat owner agreement scores to ten driver and barrier statements.

Key Findings (Surveys)

The adoption of responsible cat ownership behaviours across the Campbelltown LGA is influenced by the capacity and motivation of the cat owners. Current cat owner management behaviours and identified driver and barrier factors from the public consultation are summarised below.

- Reported de-sexing rates were high but microchipping and particularly registration of cats could be improved.
- There is some support for full containment (between 36-41% adoption of indoors all the time and 18-33% restricted outdoor access). Also, some support for night curfews (between 16-30% adoption) with approximately 16-30% of cat owners currently allowing their cats to roam freely most of the time.
- A small number of cat owners had more than three cats in their household.
- One fifth of cat owners reported they cared for stray and unowned cats.
- Main drivers for containment were to reduce wildlife predation, keep the cat safe and reduce nuisance behaviour.
- Strong barriers to full containment were owners' beliefs about the needs and behaviours of their cats, as well as different perceptions of the risks at night versus those at day.
- Family members and vets were seen as important influencers for containment adoption.
- There was some agreement by cat owners that the introduction of cat containment legislation would motivate compliance. Those residents that do not own cats strongly agreed with this legislation change.

Hornsby Shire Council

Council Interview Results

Baseline cat data

The Hornsby Shire Council reported from 2010 to 2021 they had:

- 6112 registered cats
- 9457 microchipped cats

The number of de-sexed cats was unknown.

Current cat management initiatives

Hornsby Shire Council undertakes a range of cat management initiatives. In conjunction with the National Desexing Network they offer subsidised de-sexing program, and strongly recommend cat containment as part of 'responsible cat ownership'. This LGA currently has no declared Wildlife Protection Areas (WPAs).

Compliance monitoring

As part of compliance monitoring this Council cross-checks entries in the Companion Animal Register to access information regarding those cats not registered and / or de-sexed. Owners are contacted, advising them of the Council's requirements.

Information

The Hornsby Shire Council has a pamphlet available providing information on responsible cat management. Their Officers provide one on one support when required.

Nuisance cats

Officers liaise with residents to trap and return nuisance domestic cats to their owner. Owners are educated on the importance of keeping their cat contained.

Stray and feral cats

There are several known locations in urban areas of this LGA where feral cats breed and are fed by residents. The Council actively works with residents who report feral cats. Officers trap the reported cats and determine if they need to be returned to the owner or if the cat is feral.

What the Council thought was working well

By actively responding to customer concerns of cats causing environmental and private premises damage has resulted in a reduction of roaming cats in this LGA.

Challenges to effective cat management

The main challenges of cat management identified by Hornsby Shire Council:

- Residents who regularly feed cats but do not take responsibility (don't de-sex)
- Residents with multiple animals who might not have the capacity to ensure their cats are managed appropriately.

Future intentions

Identified future cat management intentions:

- Continue community education on cat containment
- Engage with 'Link Housing' so can support cat owning residents.

Stakeholder Interview Results

Involvement in cat management

A range of stakeholders from the Hornsby LGA were interviewed. Their roles and activities related to cat management:

- **Thornleigh Vet Hospital:** vet hospital, also Ku-ring-gai Pound.
- **Hornsby Heights Vet Hospital:** rescue, rehabilitate and adopt out kittens.
- **A community member:** foster rescued animals.

What stakeholders' thought was working well

Stakeholders were asked what was working well for cat management in their local LGA. The main factors identified by the stakeholders:

- The strong emphasis on de-sexing, microchipping and vaccinating
- Advice to owners on why to keep cats inside and providing the public with avenues to find owners of lost cats.

Challenges to effective cat management

The main challenges to effective cat management identified by the stakeholders:

- Needs to be clearer rules for cat owners
- Outdoor cats causing wildlife injuries and fights
- Local populations of stray and feral cats.

Cat management vision

Aim of cat management

Stakeholders were asked what the aim of cat management should be in their LGA. There was consensus among the stakeholders that the main aims should be to:

- Reduce the stray population (trap de-sex and release, rehome friendly cats)
- Reduce number of cats per household
- Require cat owners to de-sex and contain their cats.

Required information and actions

Stakeholders were asked what information and actions are required to manage cats more effectively in their local LGA. Their responses:

- Change legislation to require 24-hour cat containment and clarify management of stray cats
- More involvement with community towards TNR and keeping cats safe
- Rules on how many cats one owner can have (max two)

- Monitoring the impacts on wildlife populations
- Using video collars to see what the cats are predated, important because cats can be killing lots of wildlife without roaming far from home.

How to deal with conflict

Stakeholders were asked about the best ways to deal with conflicts that arise around cat management in their communities. Their suggestions:

- Clear laws with respect to strays and microchipping
- Factual evidence to our clients on their cat's health.

Key Findings (Interviews)

How domestic cat management is being handled is influenced by the capacity and motivation of both the Council and the community. The main benefits of current programs and challenges for the Hornsby Shire LGA are summarised below.

- Roaming cats remain a problem, so needs to be clearer rules for cat owners and continue community education on cat containment.
- Focus needed on the populations of stray and feral cats. Behaviour change strategies to target residents who regularly feed cats but do not take responsibility (e.g., de-sex).
- Introduce restrictions on the number of cats kept in households.
- Provide more support to residents with multiple animals who might not have the capacity to ensure their cats are managed appropriately, and those cat owners in government housing.

Online survey

Hornsby Shire Council was not one of the selected LGAs targeted with the phone survey, however residents were invited to have their say via the online survey.

Respondent demographics

- 639 respondents completed the online survey – 391 (61%) were cat owners and 248 (39%) did not own a cat.
- Most cat owners were female (310, 78%), with 62 males (16%). Three cat owners identified as non-binary, and 16 did not answer this question.
- Most non-cat owners were also female (174, 70%), with 66 males (27%), one non-binary and seven non-responses.
- The overall average age was 47.4 years (± 13.2). The average age for cat owners was younger – 45.3 years (± 12.2), and non-cat owners was older – 50.7 years (± 14.1).

Cat ownership behaviours

Just over half of respondents (n=213, 54%) had one cat in their household, 128 (33%) owned two cats, 35 (9%) owned three cats and eleven (3%) owned four cats. The remaining 1% owned five or more cats, the greatest number reported was six cats in a household.

Keeping cats indoors all the time was the most common cat living arrangement (n=133, 34%). The next most popular arrangements were keeping cats inside at night but letting them roam freely during the day (n=115, 29%) and allowing cats indoors and restricting their outdoor access (n=99, 25%). Forty-two respondents (11%) let their cat indoors and allowed them to roam free when outside. Two respondents had cats that freely roamed outside all the time.

Feeding of free roaming cats

Respondents were asked if they cared for any free-roaming cats that were not their own. Twenty-six respondents indicated they did care for unowned free-roaming cats - ten cat owners (3%) and 16 non-cat owners (7%).

Drivers and barriers to cat containment

Cat owners were given the opportunity in an open-ended format to list the factors they have considered when deciding whether to allow their cat to roam freely or not. At least one factor was listed by 273 (92%) of cat owners. The main factors listed by the respondents when preventing their cat from roaming freely are shown in Figure H1. Protecting wildlife, including small mammals, birds, and reptiles, was the most popular response. General safety and preventing traffic accidents were the next popular.

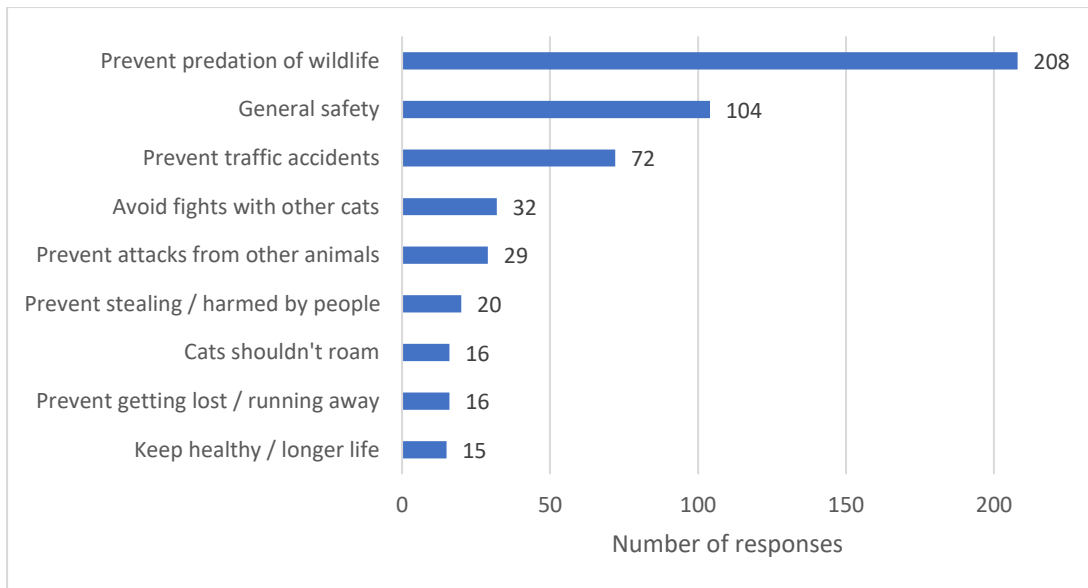


Figure H1. Main factors considered by cat owners when preventing their cat from roaming freely.

The listed factors considered by cat owners when deciding to allow their cat to roam freely are shown in Figure H2. The top response was time of day – cats should be prevented from roaming at night it was OK to roam during the day. The next popular response was the perception that their cat doesn't roam very far from their property.

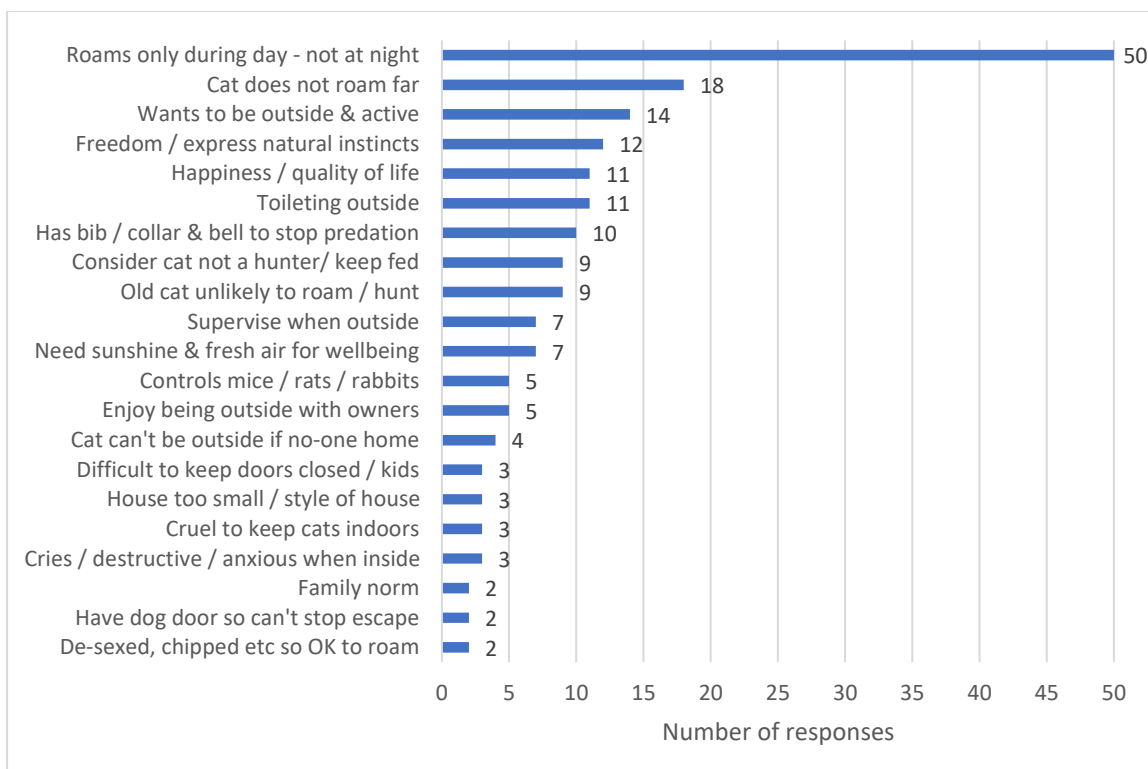


Figure H2. Main factors considered by cat owners when deciding to allow their cat to roam freely.

After listing their own considerations, cat owners were then asked to rate their agreement with 15 statements pertaining to previously identified drivers of and barriers to preventing cats from roaming freely (See Q7 in Appendix 5). The average ratings are summarised in Figure H3.

On average respondents disagreed that their current living circumstances made it difficult to prevent their cat from roaming. There were no statistical differences in this agreement rating and their own / rent situation ($F=1.12, p=0.38$), however there was a difference with respondent's type of dwelling ($F=2.30, p=0.30$). Respondents living in flats or units disagreed more strongly with this statement, than respondents all other types of dwellings.

Protecting wildlife was the strongest driver of cat containment. This corresponds with the results from the open-ended question (Figure H1). On average respondents disagreed that cats should be free to roam, however there were statistical differences ($F=46.93, p<0.001$) between those owners who currently restrict their cat's movements (Inside all the time 1.51, Inside & restricted outside 1.51), practice a night curfew (2.70) or let their cats roam freely (Inside & free outside 3.43, Free outside all the time 3.50).

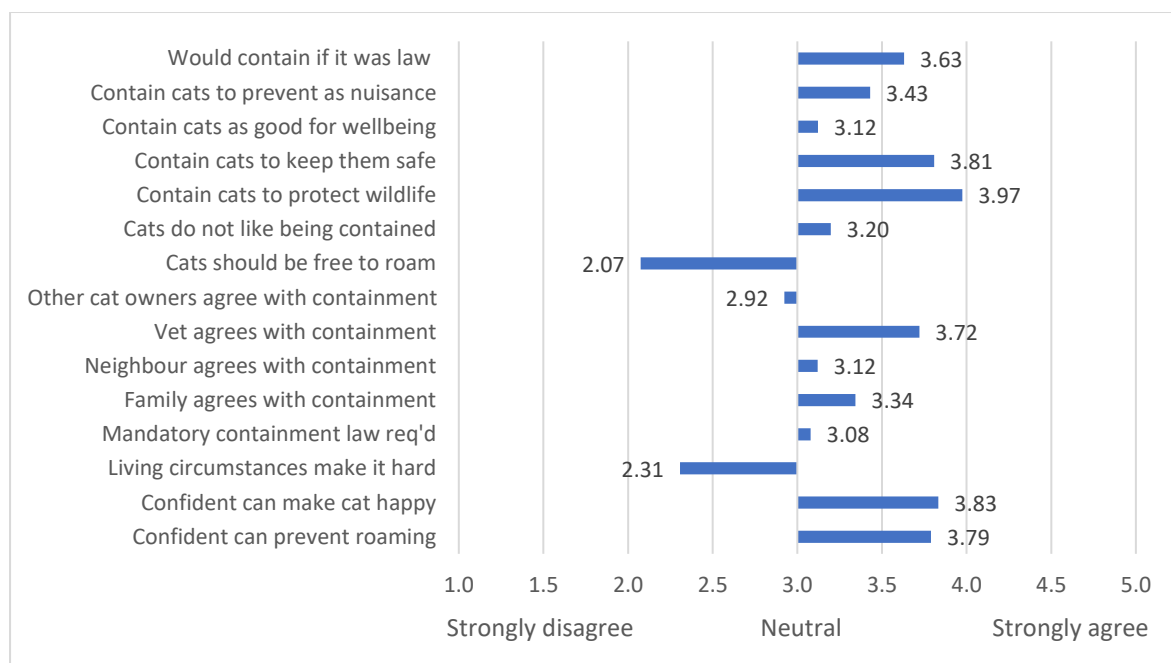


Figure H3. Mean cat owner agreement scores to the 15 driver and barrier statements

Those respondents who did not own cats were also to rate their agreement with 10 statements pertaining to previously identified drivers of and barriers to preventing cats from roaming freely. The average ratings are shown in Figure H4. There were statistical differences between the ratings of cat owners and non-owners for all ten shared statements. Those respondents who do not own cats were more likely to agree that cats should be prevented from roaming to protect wildlife ($F=64.99, p<0.001$), to prevent them being a nuisance ($F=89.88, p<0.001$), to keep them safe ($F=13.74, p<0.001$), and to improve the cat's well-being ($F=28.86, p<0.001$).

They were less likely to agree that cats should be free to roam ($F=77.81, p<0.001$) and that cats do not like to be contained ($F=77.81, p=0.01$). These respondents also were more likely to agree that their family ($F=94.91, p<0.001$), neighbours ($F=10.44, p=0.001$) and vets ($F=26.58, p<0.001$) supported cat containment, and that the laws should be changed ($F=159.09, p<0.001$).

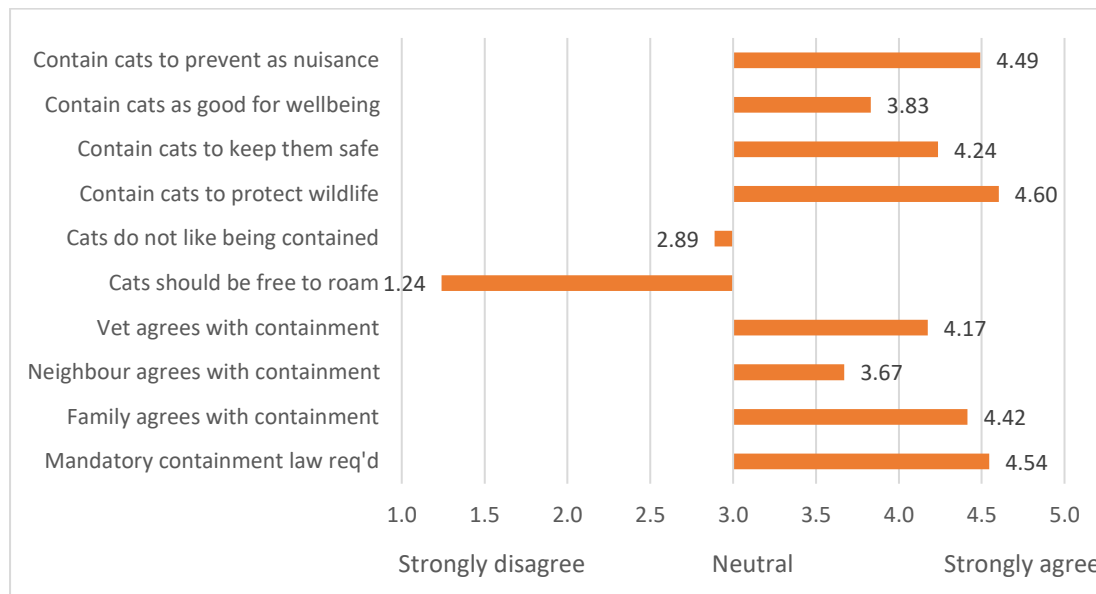


Figure H4. Mean non-cat owner agreement scores to ten driver and barrier statements.

Key Findings (Surveys)

The adoption of responsible cat ownership behaviours across the Hornsby LGA is influenced by the capacity and motivation of the cat owners. Current cat owner management behaviours and identified driver and barrier factors from the public consultation are summarised below.

- There is some support for full containment (34% currently keeping cats indoors all the time and 25% restricted outdoor access) and night curfews (currently 30% adoption). Further encouragement is required particularly for the remaining cat owners who pose no restrictions on their cats' movements.
- There is a small number of residents who care for stray and unowned cats.
- Main drivers for containment were to reduce wildlife predation and keep the cat safe.
- Strong barriers to full containment were owners' perceptions of the wildlife predation risks at night versus those during the day, and beliefs about their cats' behaviours and needs.
- Vets were seen as important influencers for containment adoption by cat owners.
- There was some agreement that the introduction of cat containment legislation would motivate compliance. Those residents that do not own cats strongly agreed with this legislation change.

Kyogle Shire Council

Council Interview Results

Baseline cat data

Kyogle Shire Council reported in the past year they had:

- 288 registered cats
- 415 microchipped cats.

The number of de-sexed cats was unknown.

Current cat management initiatives

Kyogle Shire Council currently does not limit the number of cats that could be kept per household. They recommend cats be kept at home but do not have an official night curfew / containment policy. They did not report any declared Wildlife Protection Areas (WPAs).

A subsidised de-sexing program is offered in the LGA by the Animal Farewell League.

Currently this LGA is an active partner in their Regional Cat Management Plan, working with the North Coast Local Land Services and other stakeholders in a range of feral cat management programs.

Compliance monitoring

As part of compliance monitoring Kyogle cross-checks entries in the Companion Animal Register to access information regarding those cats not registered and / or de-sexed. Owners are contacted, advising them of the Council's requirements. Compliance is not consistently monitored when individual cats are either brought to their attention and / or impounded.

Information

The Kyogle Shire Council provides information on responsible cat ownership in their community newsletter.

Nuisance cats

Nuisance cat complaints are received through the Council's Customer Request Management System but currently given low priority because of the lack of resources.

Stray and feral cats

Survey, monitoring and trapping work by researchers, other land managers (e.g. NPWS), Landcare and property owners has shown that there is a problem with stray/feral cats. Kyogle LGA is currently working with the North Coast Local Land Services (the NSW Government agency in charge of implementing the regional Pest Animal Management Plan – developed under the NSW *Biosecurity Act 2015*) in trapping programs targeting stray and feral cat populations. The trapping is conducted by an outside company, Biodiversity Australia.

What the Council thought was working well

Being part of the Regional Cat Management Plan project and working with other stakeholders was the one thing Kyogle Council noted was working well for them. With regards to pet cats there was nothing in particular – highlighting the problems this LGA is currently facing with cat

management, and how this project - Keeping Cats Safe at Home - will be able to assist by increasing their capacity to improve cat management outcomes.

Challenges to effective cat management

The main challenges of cat management identified by this LGA:

- Availability of dedicated staff, budget and resources
- Lack knowledge on what could be to manage cats – i.e., policies regarding number of cats per household; containment or confined; areas where cats prohibited, compliance enforcement and monitoring
- Council's pound facilities cannot accept cats
- Information on Council's website outdated
- As Council currently treats cat management as a low priority, the community may no longer think it is worth reporting cat nuisance.

Future intentions

Identified future cat management intentions:

- Education within Council to increase priority of cat management
- Improved resources, and increase in dedicated staff
- Development of cat management policies and review of practices.

Stakeholder Interview Results

Involvement in cat management

A range of stakeholders from the Kyogle LGA were interviewed. Their roles and activities related to cat management:

- **Kyogle Veterinary Clinic:** Cats make up about half of their small animal work. Conduct discounted de-sexing for Animal Welfare League.
- **K.I.T.E.N. Rescue Inc:** Rehome (microchip, register, de-sex) abandoned and surrendered cats.
- **Northern Rivers Wildlife Carers Inc:** Not directly involved but have worked with Catnip a cat enclosure company and the local RSPCA branch.
- **Lismore Animal Rights and Rescue Shelter:** Help with de-sexing and re homing animals. Assist with veterinary assistance.
- **North Coast Local Lands Service:** Work under the NSW Biosecurity Act to manage feral or stray cats in rural areas. Work with Council to handle collected cats.

What stakeholders' thought was working well

Stakeholders were asked what was working well for cat management in their local LGA. The main factors identified by the stakeholders:

- Good rangers
- Subsidised de-sexing days (de-sexing program with Animal Farewell League)
- Campaigns promoting cats inside the properties and building cat enclosures
- Local cat rescue lady rehoming kittens
- Development of regional Cat Management Plan.

Challenges to effective cat management

The main challenges to effective cat management identified by the stakeholders:

- Cost a barrier to de-sexing as a low-income area
- Changing beliefs about early de-sexing (vets & owners)
- Overpopulation of cats and lots of colonies as people don't de-sex and abandon them.
- Lack of Council capacity and resources (Council doesn't have pound)
- Council doesn't have a good record with rehoming, most cats they take are euthanised
- Rescue groups unable to fill the gap
- The belief cat owners have cats should do whatever they want.

Cat management vision

Aim of cat management

Stakeholders were asked what the aim of cat management should be in their LGA. There was consensus among the stakeholders that the main aim should be enforcing compulsory de-sexing and at least introduce a night curfew for cats.

Required information and actions

Stakeholders were asked what information and actions are required to manage cats more effectively in their local LGA. Their responses:

- Clear information for the public
- More accessible de-sexing – subsidised de-sexing for low socioeconomic population
- An easy way for local people to surrender unwanted kittens so they are not dumped
- Encouraging cat owners to think about the safety of their cats
- Provide information and plans on how to build economical cat enclosures
- Legislation that enforces at least a night curfew.

How to deal with conflict

Stakeholders were asked about the best ways to deal with conflicts that arise around cat management in their communities. Their suggestions:

- Rescue groups collaborating with each other
- Having group sessions to talk about the problems we are all facing and try to find solutions
- Councils should be more involved.

Key Findings (Interviews)

How domestic cat management is being handled is influenced by the capacity and motivation of both the Council and the community. The main benefits of current programs and challenges for the Kyogle Shire LGA are summarised below.

- Policy, practices, resourcing and staffing issues within Councils needs to be addressed.
- Subsidised de-sexing program run in conjunction with the Animal Farewell League and free pet registration have been beneficial. This needs to be boosted as still many owners can't afford to de-sex cats.
- There is a need to provide better information about responsible cat management, along with effective behaviour change strategies.
- Effective rehoming of surrendered animals needs to be addressed.
- Continued cooperation with other agencies on addressing the populations of stray and feral cats.
- There is a reluctance and disagreement about cat containment practices. Strengthening the current legislation would add clarity.

Phone survey

Respondent demographics

Kyogle Shire was one of the LGAs to be targeted with the phone survey. Thirty responses were collected. Most of the respondents (87%) were female the remaining 13% were male. The average age of respondents was 53 years.

When asked to describe their locality, nine (30%) indicated they lived in a town, two (7%) as semi-rural, and 19 (63%) as rural. Most of the respondents (n=28, 93%) lived in a house with a medium to large outdoor space (yard). One lived in a house with only a small outside space (courtyard or small garden) and one (3%) chose the 'other' option but did not offer a description. Most of the respondents indicated they owned their dwelling (n=24, 80%), and six were renting (20%).

Adoption of responsible cat ownership behaviours

Just over half of respondents (n=17, 57%) had one cat in their household, four (13%) owned two cats, five (17%) owned three cats and two (7%) owned four cats. Two respondents indicated they had eight cats each.

De-sexing rates were reasonably high (93%) with 28 respondents reporting their cats were de-sexed. Microchipping rates were much lower at 53%, with one respondent unsure. Registration with the local council was lower again at 37%, with two respondents unsure if their cats were registered.

Keeping cats indoors at night but letting them roam freely during the day was the most common cat living arrangement (n=12, 40%). The next most popular arrangements were letting their cat indoors and allowing them to roam free when outside or letting the cat live

outside all the time (both n=6, 20%). Four owners (13%) were keeping cats indoors all the time and two (7%) allowed their cat indoors and restricted their outdoor access (e.g. in an escape-proof yard / run, or on a lead).

Of the respondents who allowed their cats to roam freely outside (n=24), all indicated that their cat would be likely to some extent be roaming freely in the morning (6am-noon), 23 (96%) indicated that their cat would be likely to some extent be roaming freely in the afternoon (noon-6pm), 15 (63%) indicated that their cat would be likely to some extent be roaming freely in the evening (6pm-midnight), while 13 (54%) indicated that their cat would be likely to some extent be roaming freely from midnight to dawn.

The respondents who allowed their cats to roam freely outside were asked about their future intentions of preventing their cats from roaming freely. Results are presented in Figure K1. In the future respondents were more likely to prevent their cat roaming freely all the time (mean 1.8 where 1= extremely unlikely and 5= extremely likely) or prevent it from roaming more often than they do currently (mean 1.7) than install a fence or enclosure (mean 1.6).

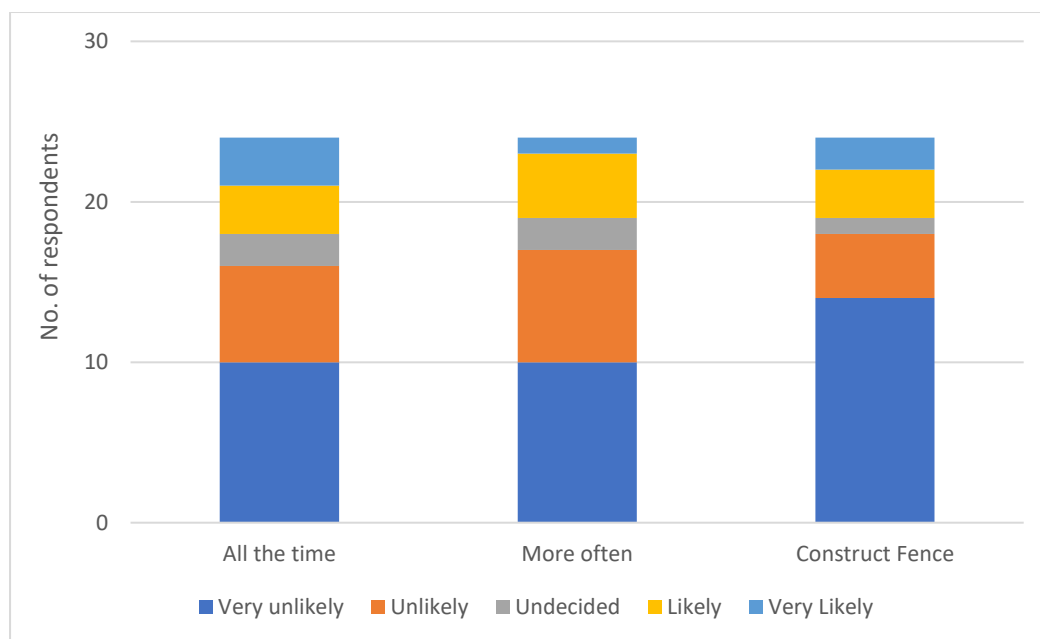


Figure K1. Likelihood of preventing free roaming of cats in the future across Kyogle LGA.

Drivers and barriers to cat containment

Respondents were given the opportunity in an open-ended format to list at least three factors they have considered when deciding whether to allow their cat to roam freely or not. All respondents listed at least one factor. The main factors listed by the respondents when preventing their cat from roaming freely are shown in Figure K2. Protecting wildlife, including small mammals, birds, and reptiles, was the most popular response. Avoiding fighting with other cats, general safety and preventing people stealing or harming the cats were the next frequent.

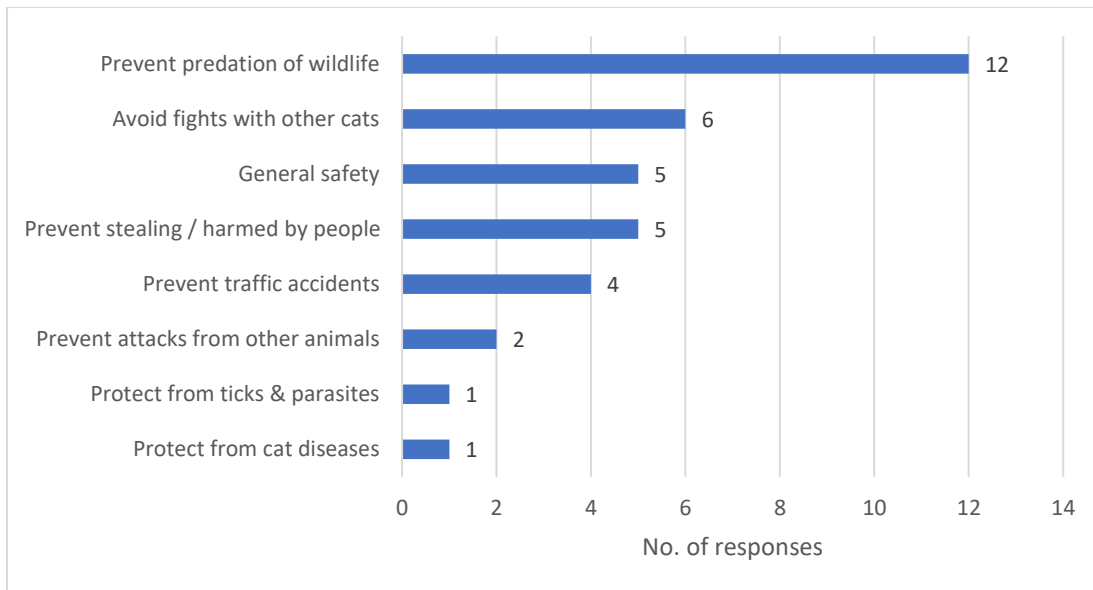


Figure K2. Main factors considered by respondents when preventing their cat from roaming freely.

The listed factors considered by respondents when deciding to allow their cat to roam freely are shown in Figure K3. The consideration that their cat doesn't roam very far from their property and whether the cat controlling pest rodents or rabbits were the top two responses.

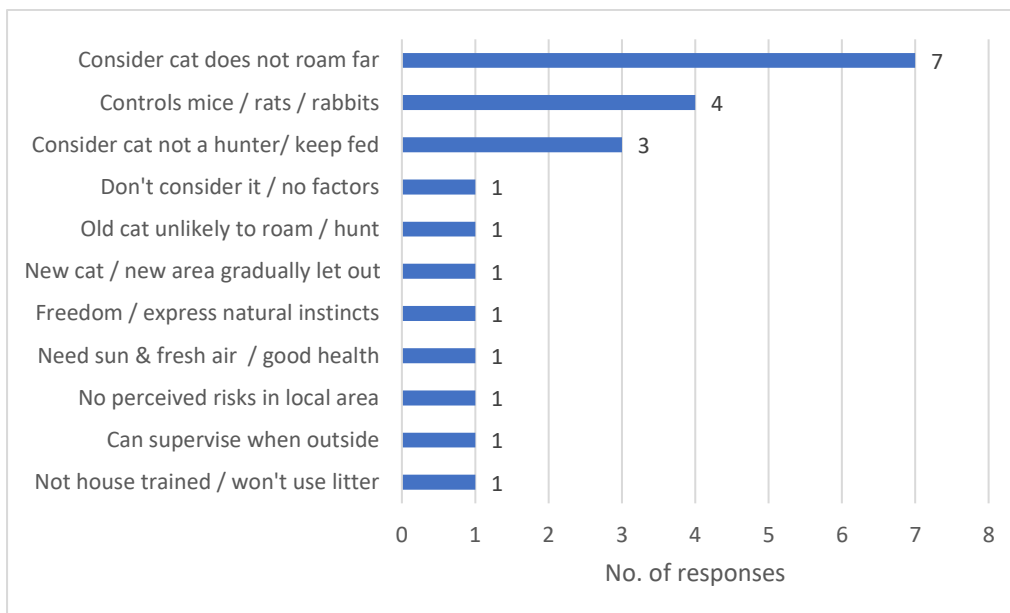


Figure K3. Main factors considered by respondents when deciding to allow their cat to roam freely.

After listing their own considerations, respondents were then asked to rate their agreement with 14 statements pertaining to previously identified drivers of and barriers to preventing cats from roaming freely (See Q5 in Appendix 4). The average ratings are summarised in Figure K4.

Most respondents were confident they could provide everything to ensure their cat was happy. Most respondents disagreed that their current living circumstances made it difficult to prevent their cat from roaming. There were no statistical differences in this agreement rating and respondent's type of dwelling ($F=0.88, p=0.43$), locality ($F=1.61, p=0.21$) or own / rent situation ($F=2.34, p=0.14$).

Wildlife protection was the strongest drivers of cat containment. This corresponds with the results from the open-ended question (Figure K2). On average respondents disagreed that cats should be free to roam, however there were differences between those owners who currently restrict their cat's movements (Inside all the time 1.00, Inside & restricted outside 1.00), practice a night curfew (2.5) or let their cats roam freely (Free outside all the time 2.17, Inside & free outside 2.83). Owing to the small, unequal sample sizes these differences could not be statistically compared.

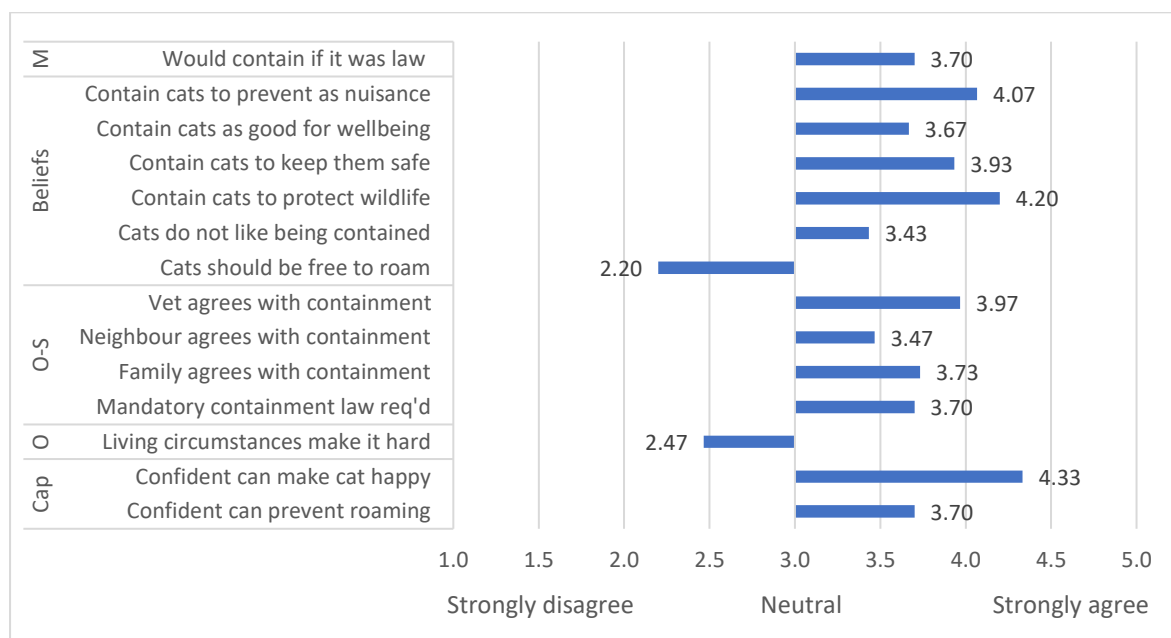


Figure K4. Mean agreement scores to the 14 driver and barrier statements (Cap=Individual capability factors, O=Physical opportunity factor, O-S=Social opportunity factors, Beliefs=Internal motivational factors, M=External motivational factor).

Online survey

Respondent demographics

- 90 respondents completed the online survey – 24 (27%) were cat owners and 66 (73%) did not own a cat.
- Most cat owners were female (17, 71%), with five males (21%). Two did not answer this question.
- Most non-cat owners were also female (38, 58%), with 23 males (35%) and three respondents who identified as non-binary (5%). Two did not answer this question.
- The overall average age was 56.3 years (± 14.7). The average age for cat owners (56.3 years ± 12.8) and non-cat owners (56.4 years ± 15.4) were similar.

Cat ownership behaviours

The majority of respondents (n=14, 58%) had one cat in their household, seven (29%) owned two cats, and three (13%) owned three cats.

Keeping cats indoors at night but letting them roam freely during the day and keeping cats indoors all the time were the most common cat living arrangement (both n=8, 33%). The next most popular arrangements were allowing cat indoors either allowing them to roam free when outside or restricting their outdoor access (both n=4, 17%). No respondents reported having a cat that lived outside all the time.

Feeding of free roaming cats

Respondents were asked if they had cared for any free-roaming cats that were not their own. Three non-cat owners (5%) indicated they did care for unowned free-roaming cats. No cat owners reported this behaviour.

Drivers and barriers to cat containment

Cat owners were given the opportunity in an open-ended format to list the factors they have considered when deciding whether to allow their cat to roam freely or not. At least one factor was listed by 24 (96%) of the cat owners. The main factors listed by the respondents when preventing their cat from roaming freely are shown in Figure K5. Protecting wildlife, including small mammals, birds, and reptiles, was the most popular response.

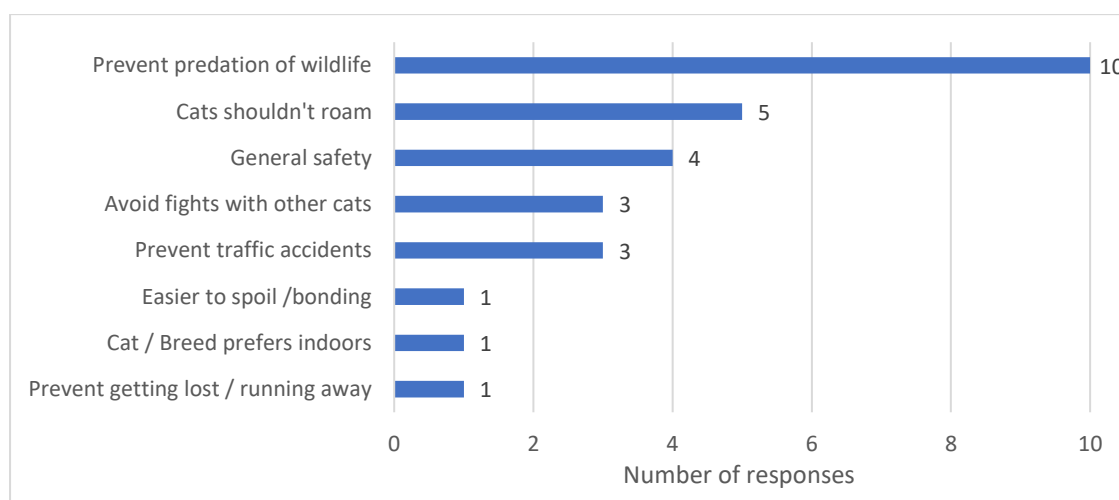


Figure K5. Main factors considered by cat owners when preventing their cat from roaming freely.

The listed factors considered by cat owners when deciding to allow their cat to roam freely are shown in Figure K6. The top responses were the time of day – cats should be prevented from roaming at night and it was OK during the day, they had an older cat who was unlikely to roam or hunt, and their cat became very anxious and destructive if it was not allowed outside.

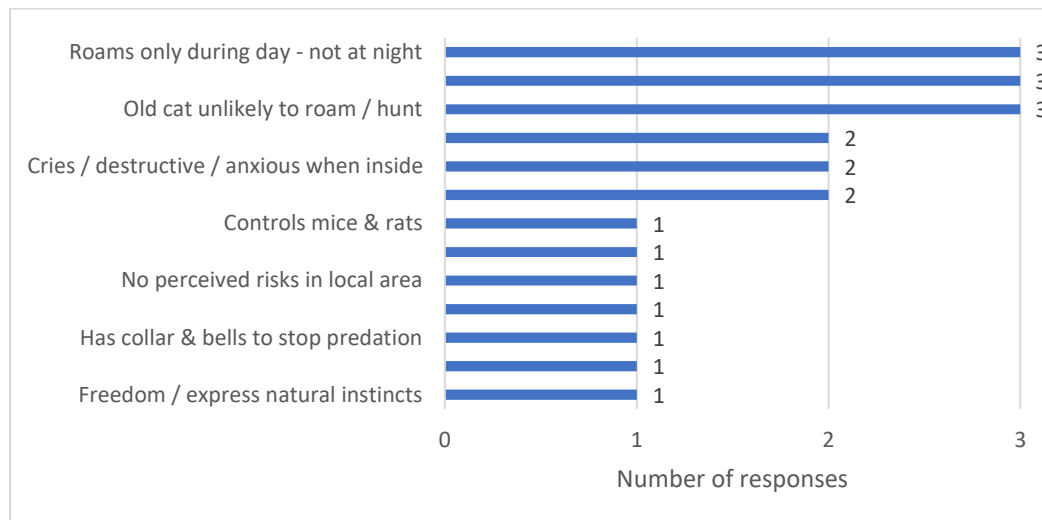


Figure K6. Main factors considered by cat owners when deciding to allow their cat to roam freely.

After listing their own considerations, cat owners were then asked to rate their agreement with 15 statements pertaining to previously identified drivers of and barriers to preventing cats from roaming freely (See Q7 in Appendix 5). The average ratings are summarised in Figure K7.

Online respondents were not as confident they could prevent their cat from roaming if they wished to, and they could provide everything to ensure their cat was happy as the phone survey respondents. Most respondents disagreed that their current living circumstances made it difficult to prevent their cat from roaming. Owing to the small sample sizes the differences between dwelling types and ownership could not be statistically compared.

Wildlife protection was the strongest drivers of cat containment. This corresponds with the results from the open-ended question (Figure K2). On average respondents disagreed that cats should be free to roam, however there were differences between those owners who currently restrict their cat’s movements (Inside all the time 1.25, Inside & restricted outside 1.25), practice a night curfew (2.75) or let their cats roam freely (Inside & free outside 2.50). Owing to the small sample sizes these differences could not be statistically compared.

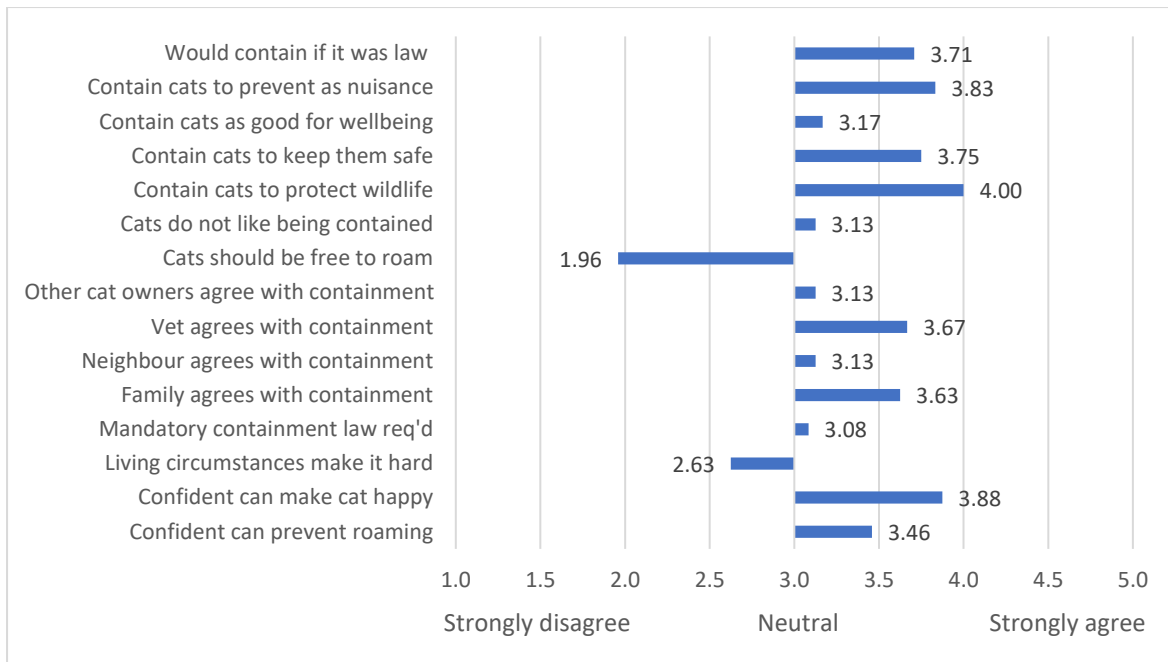


Figure K7. Mean cat owner agreement scores to the 15 driver and barrier statements.

Those respondents who did not own cats were also to rate their agreement with 10 statements pertaining to previously identified drivers of and barriers to preventing cats from roaming freely. The average ratings are shown in Figure K8. There were statistical differences between the ratings of cat owners and non-owners for four of the ten shared statements. Those respondents who do not own cats were less likely to agree that cats should be free to roam ($F=20.63, p < 0.001$). These respondents were more likely to agree that their family ($F=25.98, p < 0.001$) and vets ($F=6.86, p=0.01$) supported cat containment, and that the laws should be changed ($F=40.54, p < 0.001$).

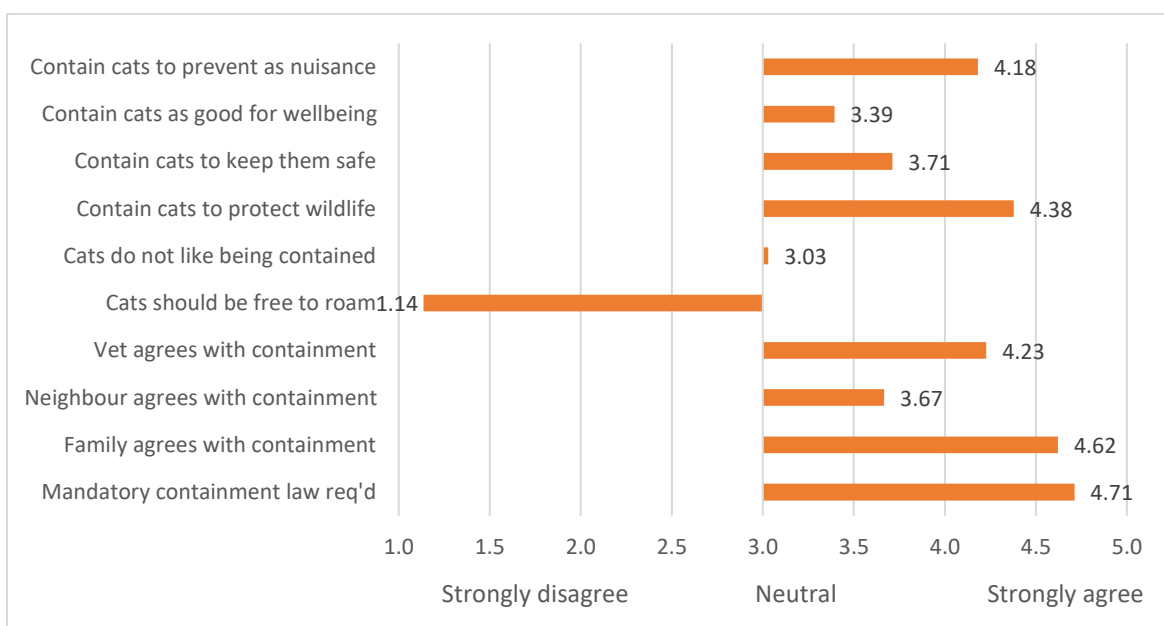


Figure K8. Mean non-cat owner agreement scores to ten driver and barrier statements.

Key Findings (Surveys)

The adoption of responsible cat ownership behaviours across the Kyogle LGA is influenced by the capacity and motivation of the cat owners. Current cat owner management behaviours and identified driver and barrier factors from the public consultation are summarised below.

- Reported de-sexing rates were reasonable but microchipping and registration of cats need to be improved.
- There is some support for night curfews (between 32-40% adoption), however support for full containment is lower (between 13-32% adoption of indoors all the time and 7-16% restricted outdoor access) and needs to be encouraged. Around 20-40% of cat owners pose no restrictions on their cats' movements.
- There is a small number of residents who care for stray and unowned cats.
- The main drivers for containment were to reduce the impact on wildlife as well as reduce the nuisance caused to neighbours.
- Strong barriers for full containment were perceptions of the wildlife predation risks at night versus those at day and the cat's personality and behaviour.
- With the larger proportion of rural residents and reliance on cats to control pests, de-sexing of these unrestricted cats is an important issue.
- There was moderate agreement that the introduction of cat containment legislation would motivate compliance. Those residents that do not own cats strongly agreed with this legislation change.

Northern Beaches Council

Council Interview Results

Baseline cat data

The Northern Beaches Council reported they had:

- 16,821 registered cats
- 16,866 microchipped cats.

The number of de-sexed cats was unknown.

Current cat management initiatives

The NSW Companion Animals Act 1998 allows Councils to declare Wildlife Protection Areas (WPAs). Northern Beaches has two categories of WPAs based on the special habitat that these areas contain: Category 1 - dogs and cats prohibited at all times, and Category 2 - cats prohibited at all times but dogs permitted on leash on Council-maintained pathways.

The Council strongly recommends 'responsible cat ownership', including cat containment.

Compliance monitoring

As part of compliance monitoring this Council cross-checks entries in the Companion Animal Register to access information regarding those cats not registered and / or de-sexed. Owners are contacted, advising them of the Council's requirements.

The Council undertakes regular monitoring and trapping programs to detect and remove cats from their WPAs. Owners may be fined if their cat is found in these areas.

Information

The Northern Beaches Council has information outlining cat owner responsibilities, cat control programs and further resources available on their website. Their Officers provide cat owners with a printed brochure summarising these topics. Bi-monthly digital newsletter and social media posts can feature information about cats.

Nuisance cats

A Council Ranger will attend to investigate any nuisance cat complaints. Nuisance orders are issued, when enough evidence (statements, video and/or photos and medical reports) can be collected.

Stray and feral cats

Stray and feral cats are not managed by the Council as they are not considered a problem.

What the Council thought was working well

The Council was asked what they thought was working well with their cat management. Their responses:

- Mail-outs to unregistered cat owners
- Drafting of marketing plans for Responsible Cat Ownership.

Challenges to effective cat management

The main challenges of cat management identified by Northern Beaches Council:

- Limited powers under current legislation to enforce responsible cat ownership
- Difficulties in collecting proof that a cat has repeatedly caused issues for a Nuisance Order, and its only in place for 6 months.

Future intentions

Identified future cat management intentions:

- Active social media presence to engage community
- Including at ownership information in rate mail-out
- RSPCA support for trapping in WPAs.

Stakeholder Interview Results

Involvement in cat management

A range of stakeholders from the Northern Beaches LGA were interviewed. Their roles and activities related to cat management:

- **Collaroy Plateau Veterinary Hospital:** Treat domestic cats for illness & injury and are involved in preventative health care.
- **Mona Vale Veterinary Hospital:** Treat many injured cats involved in accidents. Perform de-sexing & microchipping.
- **Pittwater Natural Heritage Association:** No direct involvement but support management of free-roaming cats.
- **Save Manly Dam Catchment Committee:** No direct involvement but are concerned by the impact of domestic and feral cats on wildlife.
- **Cat-owning member of the public:** owns multiple cats, involved in cat rescue and assists people in social housing with getting cats de-sexed.

What stakeholders' thought was working well

Stakeholders were asked what was working well for cat management in their local LGA. The main factors identified by the stakeholders:

- Greater uptake of cat containment measures due to increase in information and use of social media to spread word
- Increase in rescue and fostering organisations established in the LGA
- Improved camera monitoring of tracks and trails to detect cats, dogs and foxes accessing the national park at night.

Challenges to effective cat management

The main challenges to effective cat management identified by the stakeholders:

- Overcoming opposition

- People who loathe to contain their cats – they refuse to acknowledge and accept the data on roaming as they believe its cats' nature to roam
- Cat management across multiple agencies – needs to be more coordination
- Stop demonising cat owners – reframe message so not just about 'cats killing wildlife'
- Council needs to be more proactive, need to address limitations to constructing cat enclosures under building codes
- Currently, there is no legal framework to deal with problem cats apart from humane trapping by individuals on their own property.

Cat management vision

Aim of cat management

Stakeholders were asked what the aim of cat management should be in their LGA. There was consensus among the stakeholders that the main aims should be to ensure all new cats are de-sexed, microchipped and fully contained and that existing cat owners should be encouraged to contain their cats to protect native fauna.

Required information and actions

Stakeholders were asked what information and actions are required to manage cats more effectively in their local LGA. Their responses:

- Publicity and education about responsible cat ownership, needs to be positive and about benefits for cats. Reach local cat owners through community Facebook groups, local magazine (Tawny Frogmouth), and free local newspaper (The Review)
- Provide better support for cat owners
- Legislation for keeping cats contained and higher penalties owners who do not comply, and rehoming/disposal of the problem cats
- Continual development of camera monitoring to better target areas of concern
- Development of a non-invasive method of tagging a camera detected cat
- Better consistency of regulation of domestic animals in natural areas between NPWS and local government.

How to deal with conflict

Stakeholders were asked about the best ways to deal with conflicts that arise around cat management in their communities. Their suggestions:

- Education is the best way to deal with conflict, in a firm and friendly manner
- Clear legislation and guidelines with ramifications for those who do not follow them as an incentive to do the right thing
- Community forums/discussion nights, surveys, discussion with local veterinary hospitals
- Outreach and knowledge base of the key parties involved – cat owners, veterinarians, environmental groups, local government rangers.

Key Findings (Interviews)

How domestic cat management is being handled is influenced by the capacity and motivation of both the Council and the community. The main benefits of current programs and challenges for the Northern Beaches LGA are summarised below.

- Adoption of cat containment improving but still need to overcome opposition by particular segments using targeted behaviour change strategies.
- Current legislation needs to be strengthened to enforce responsible cat ownership and deal with problem cats.
- Inter-agency cooperation on cat management needs to continue.

Online survey

Northern Beaches Council was not one of the selected LGAs targeted with the phone survey, however residents were invited to have their say via the online survey.

Respondent demographics

- 1,472 respondents completed the online survey – 626 (43%) were cat owners and 846 (57%) did not own a cat.
- Most cat owners were female (489, 78%), with 11 males (2%). One cat owner identified as non-binary, and 18 did not answer this question.
- Most non-cat owners were also female (546, 65%), with 265 males (31%), four non-binary and 31 non-responses.
- The overall average age was 55.0 years (± 14.1). The average age for cat owners was younger – 51.6 years (± 13.2), and non-cat owners was older – 57.6 years (± 14.3).

Cat ownership behaviours

The majority of respondents (n=383, 62%) had one cat in their household, 191 (31%) owned two cats, 30 (4%) owned three cats and ten (2%) owned four cats. The remaining 1% owned five or more cats, the greatest number reported was eleven cats in a household.

Keeping cats inside at night but letting them roam freely during the day was the most common cat living arrangement (n=226, 36%). The next most popular arrangements were keeping cats indoors all the time (n=178, 28%) and allowing cats indoors and restricting their outdoor access (n=145, 23%). Seventy-five respondents (12%) let their cat indoors and allowed them to roam free when outside. The cat of one respondent roamed freely outside all the time.

Feeding of free roaming cats

Respondents were asked if they cared for any free-roaming cats that were not their own. Fifty-five respondents indicated they did care for unowned free-roaming cats - 29 cat owners (5%) and 28 non-cat owners (3%).

Drivers and barriers to cat containment

Cat owners were given the opportunity in an open-ended format to list the factors they have considered when deciding whether to allow their cat to roam freely or not. At least one factor was listed by 574 (92%) of cat owners. The main factors listed by the respondents when preventing their cat from roaming freely are shown in Figure N1. Protecting wildlife, including small mammals, birds, and reptiles, was the most popular response. General safety and preventing traffic accidents were the next popular.

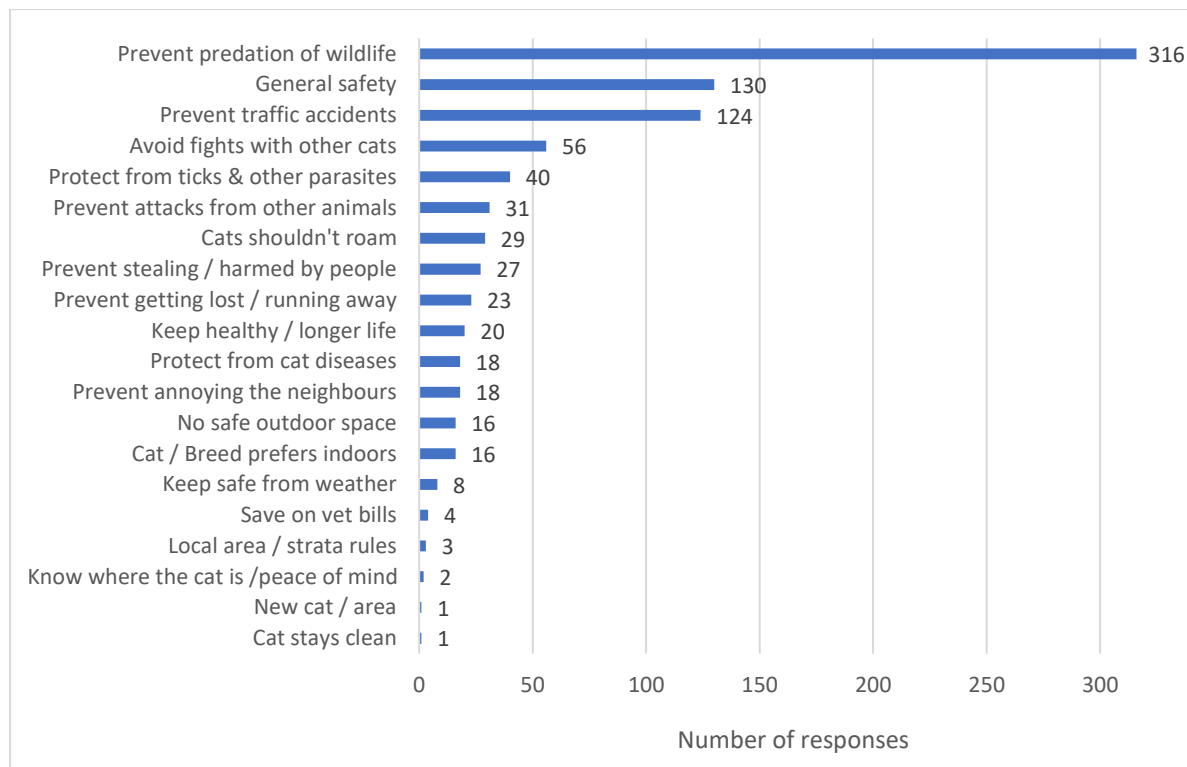


Figure N1. Main factors considered by cat owners when preventing their cat from roaming freely.

The listed factors considered by cat owners when deciding to allow their cat to roam freely are shown in Figure N2. The top response was the time of day – cats should be prevented from roaming at night it was OK during the day. The perceptions that their cat doesn't roam very far from their property and those cats need to be outside and active were next most popular considerations.

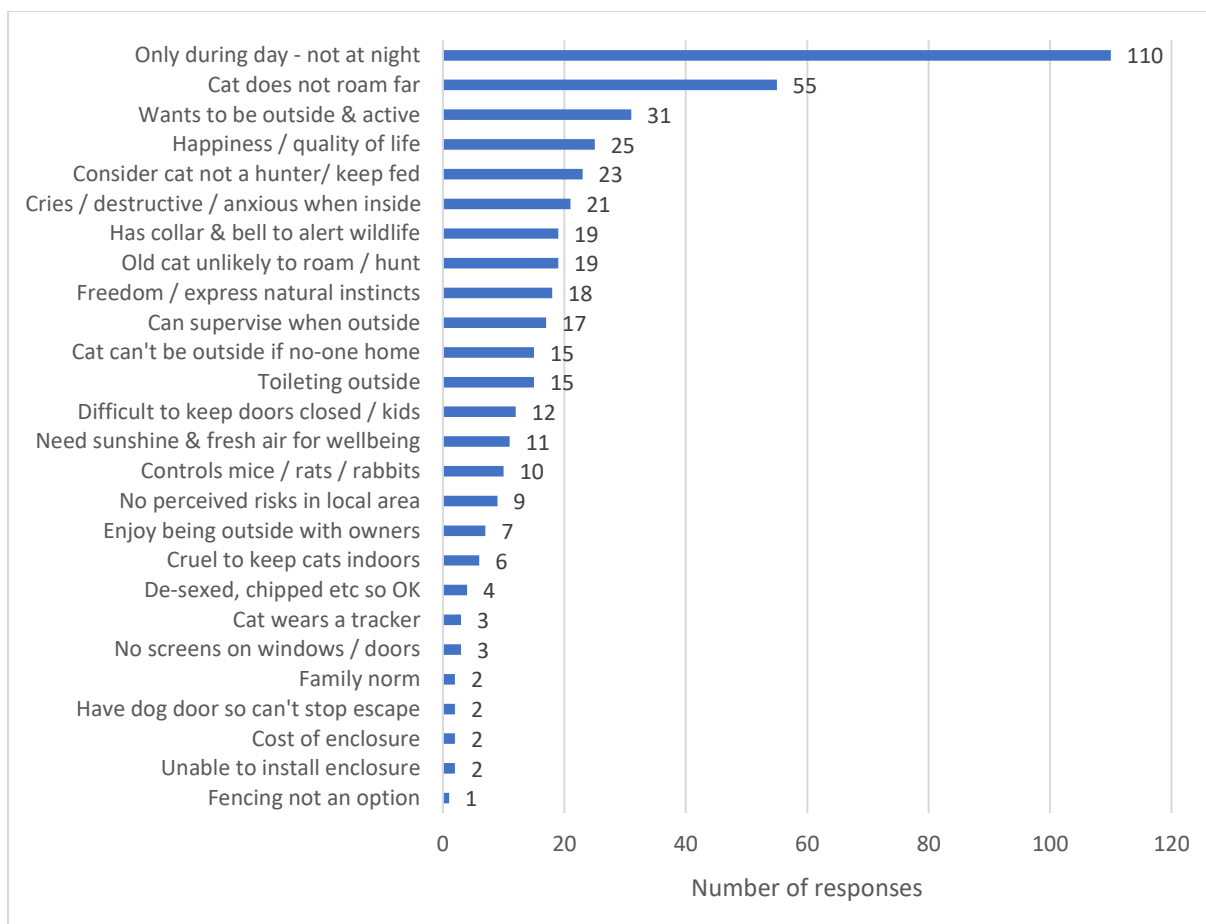


Figure N2. Main factors considered by cat owners when deciding to allow their cat to roam freely.

After listing their own considerations, cat owners were then asked to rate their agreement with 15 statements pertaining to previously identified drivers of and barriers to preventing cats from roaming freely (See Q7 in Appendix 5). The average ratings are summarised in Figure N3.

Most respondents disagreed that their current living circumstances made it difficult to prevent their cat from roaming. There were no statistical differences in this agreement rating and their own / rent situation ($F=0.31, p=0.73$), however there was a statistical difference in this agreement rating and respondent's type of dwelling ($F=5.20, p<0.001$). Respondents living in flats or units more strongly disagreed with this statement than respondents in other types of dwellings.

Protecting wildlife were the strongest drivers of cat containment. This corresponds with the results from the open-ended question (Figure N1). On average respondents disagreed that cats should be free to roam, however there were statistical differences ($F=52.62, p<0.001$) between those owners who currently restrict their cat's movements (Inside all the time 1.52, Inside & restricted outside 1.68), practice a night curfew (2.52) or let their cats roam freely (Inside & free outside 3.25, Free outside all the time 5.00).

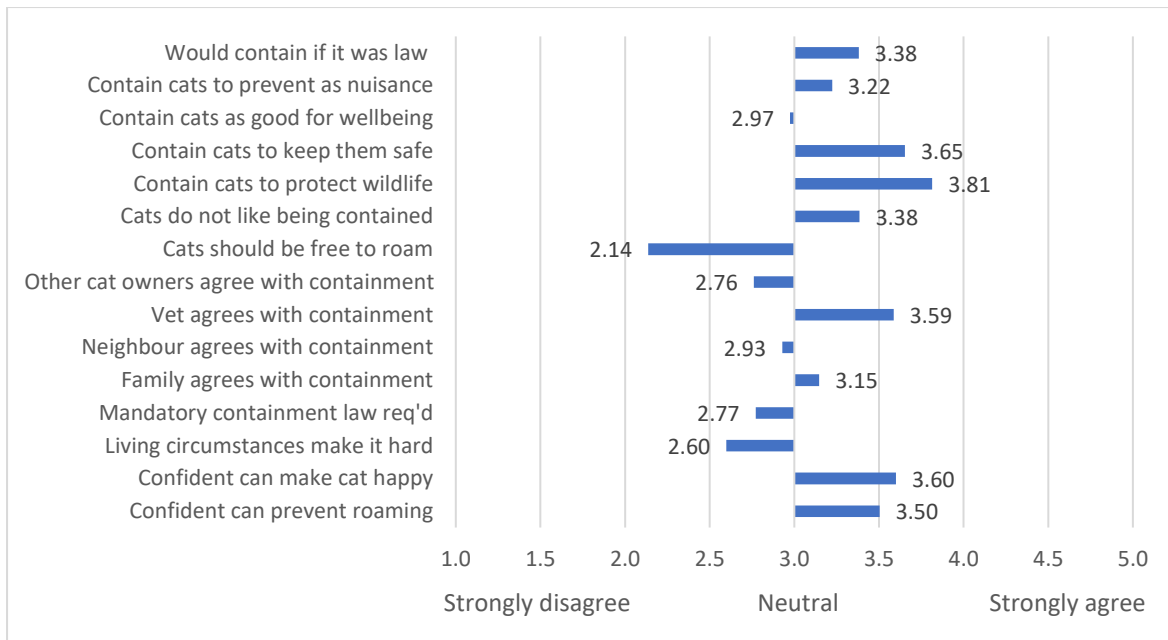


Figure N3. Mean cat owner agreement scores to the 15 driver and barrier statements

Those respondents who did not own cats were also to rate their agreement with 10 statements pertaining to previously identified drivers of and barriers to preventing cats from roaming freely. The average ratings are shown in Figure N4. There were statistical differences between the ratings of cat owners and non-owners for all ten shared statements. Those respondents who do not own cats were more likely to agree that cats should be prevented from roaming to protect wildlife ($F=178.72, p < 0.001$), to prevent them being a nuisance ($F=292.58, p < 0.001$), to keep them safe ($F=5.42, p = 0.02$), and to improve the cat's well-being ($F=40.83, p < 0.001$). They were less likely to agree that cats should be free to roam ($F=236.28, p < 0.001$) and that cats do not like to be contained ($F=21.48, p < 0.001$). These respondents also were more likely to agree that their family ($F=329.36, p < 0.001$), neighbours ($F=80.98, p = 0.001$) and vets ($F=81.23, p < 0.001$) supported cat containment, and that the laws should be changed ($F=587.19, p < 0.001$).

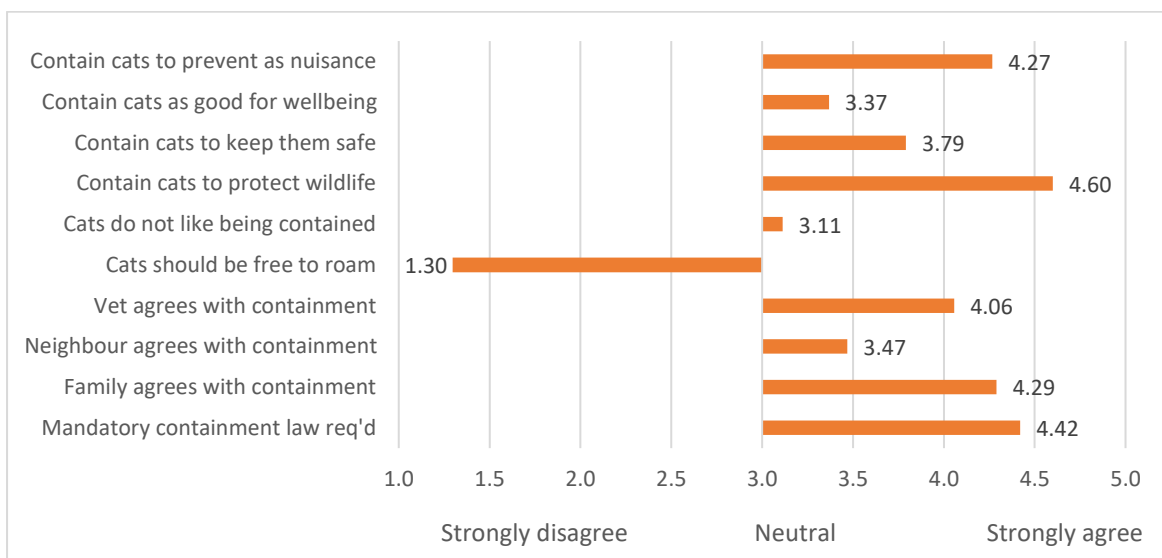


Figure N4. Mean non-cat owner agreement scores to ten driver and barrier statements.

Key Findings (Online Survey)

The adoption of responsible cat ownership behaviours across the Northern Beaches LGA is influenced by the capacity and motivation of the cat owners. Current cat owner management behaviours and identified driver and barrier factors from the public consultation are summarised below.

- There is some support for full containment (28% currently keeping cats indoors all the time and 23% restricted outdoor access), although night curfew is more popular (currently 36% adoption). Further encouragement is required to increase full containment.
- There is a small number of residents who care for stray and unowned cats.
- The main drivers for containment were to reduce wildlife predation and cat safety.
- Strong barriers to full containment were owners' perceptions of the risks of wildlife predation at night versus those at day, and beliefs about the behaviours of their cats.
- There was weak agreement by cat owners that cat containment legislation was required. Those residents that do not own cats strongly agreed with this legislation change.

City of Parramatta Council

Baseline cat data

The Council did not provide any baseline data at the time of the interview.

Current cat management initiatives

The Council generally limits households to two cats per their Keeping of Animals Policy. They recommend responsible cat ownership, including containment. The Council conducts annual de-sexing and vaccination days for cats.

City of Parramatta Council have declared eight Wildlife Protection Areas (WPAs) under the NSW Companion Animals Act 1998. Cats (controlled or not) are prohibited from these areas.

Compliance monitoring

As part of compliance monitoring this Council cross-checks entries in the Companion Animal Register to access information regarding those cats not registered and / or de-sexed. They conduct a bi-annual mail out to residents to register their animals and penalties are issued for cat registration. Council does not actively inspect properties for the number of cats, although will act if complaints are received. When nuisance complaints are received, Council will approach the cat owner and ensure that the cat is microchipped, registered and de-sexed. Council has cameras monitoring wildlife in the WPAs and conducts trapping programs to remove offending cats (initially conduct letter box drop to alert residents of cat trapping program).

Information

Council provides brochures to cat owners with information on responsible cat ownership – keeping them stimulated, having them de-sexed, microchipped and registered, wearing a collar and bell, keeping them indoors at night, etc.

Nuisance cats

Nuisance cat complaints are handled on a case-by-case basis and generally, a response is formulated based on the nature of complaints. This can be achieved with notices, orders and penalties being issued to offenders.

Stray and feral cats

Council has issues with residents who feed stray / feral cats but who don't realise that the cats then breed, and the issue gets out of control

What the Council thought was working well

The Council felt that the prospect of issuing a penalty to an offender was providing a good response from cat owners. Also, that the WPAs allowed for roaming cat removal.

Challenges to effective cat management

The main challenges of cat management identified by City of Parramatta Council:

- Limited power to act against people that keep and feed stray cats which are not de-sexed and hence able to breed
- Cats traditionally seen as an outside animal
- Resources and public education for trapping on WPAs.

Future intentions

The main identified future cat management actions:

- Harsher penalties for offenders who feed and keep unde-sexed / feral cats
- Restrictions on cat movement for example, curfews at night and restriction on cats able to roam outside of their properties to defecate with penalties
- Limit number of cats per household, maximum 2-3
- More severe penalties for breaching Nuisance Cat Order
- Penalties for people keeping more than a specified limit of cats on their property
- Focus in areas around bushlands and educate cat owners to keep cats safe at home.
- Education for people who have the old school view that cats need to roam free, that is their right
- Education in enrichment and ways to keep cats stimulated at home. About the risks of letting your cat go outside and meet stray cats who can spread disease.
- Funds for de-sexing cats all year around
- Engage with colony feeders to encourage change of conditions for the cats.

Key Findings (Interviews)

How domestic cat management is being handled is influenced by the capacity and motivation of both the Council and the community. The main benefits of current programs and challenges for the Parramatta LGA are summarised below.

- Council needs to provide more resources towards strategies to encourage residents to de-sex, register and microchip cats, as well as persuade them to keep their cats indoors/in a cat proof backyard or at least inside overnight.
- More resources are required to enforce current policies (e.g. registration) and update others (cat containment in areas near WPAs).
- Tougher legislation required on de-sexing.
- Need to engage stray cat feeders and support de-sexing and improved welfare of these animals.

Online survey

City of Parramatta Council was not one of the selected LGAs targeted with the phone survey, however residents were invited to have their say via the online survey.

Respondent demographics

- 480 respondents completed the online survey – 364 (76%) were cat owners and 116 (24%) did not own a cat.
- Most cat owners were female (305, 84%), with 50 males (14%). Nine respondents did not answer this question.
- Most non-cat owners were also female (88, 76%), with 24 males (21%). One respondent identified as non-binary and three did not answer this question.
- The overall average age was 44.5 years (± 13.3). The average age for cat owners was younger – 42.9 years (± 12.9), and non-cat owners was older – 49.5 years (± 13.3).

Cat ownership behaviours

Just under half of respondents (n=177, 49%) had one cat in their household, 136 (38%) owned two cats, 25 (7%) owned three cats and ten (3%) owned four cats. The remaining 3% owned five or more cats, the greatest number reported was eleven cats in a household.

Keeping cats indoors all the time was the most popular cat living arrangement (n=152, 42%). The next most popular arrangements were allowing cats indoors and restricting their outdoor access (n=103, 28%) and keeping cats inside at night but letting them roam freely during the day (n=71, 20%). Thirty-four respondents (9%) let their cat indoors and allowed them to roam free when outside. Three respondents let their cats roam freely outside all the time.

Feeding of free roaming cats

Respondents were asked if they cared for any free-roaming cats that were not their own. Fifty-three respondents indicated they did care for unowned free-roaming cats - 45 cat owners (12%) and 8 non-cat owners (7%).

Drivers and barriers to cat containment

Cat owners were given the opportunity in an open-ended format to list the factors they have considered when deciding whether to allow their cat to roam freely or not. At least one factor was listed by 343 (94%) of cat owners. The main factors listed by the respondents when preventing their cat from roaming freely are shown in Figure P1. Protecting wildlife, including small mammals, birds, and reptiles, was the most popular response. General safety, preventing traffic accidents and avoiding fights with other cats were the next popular.

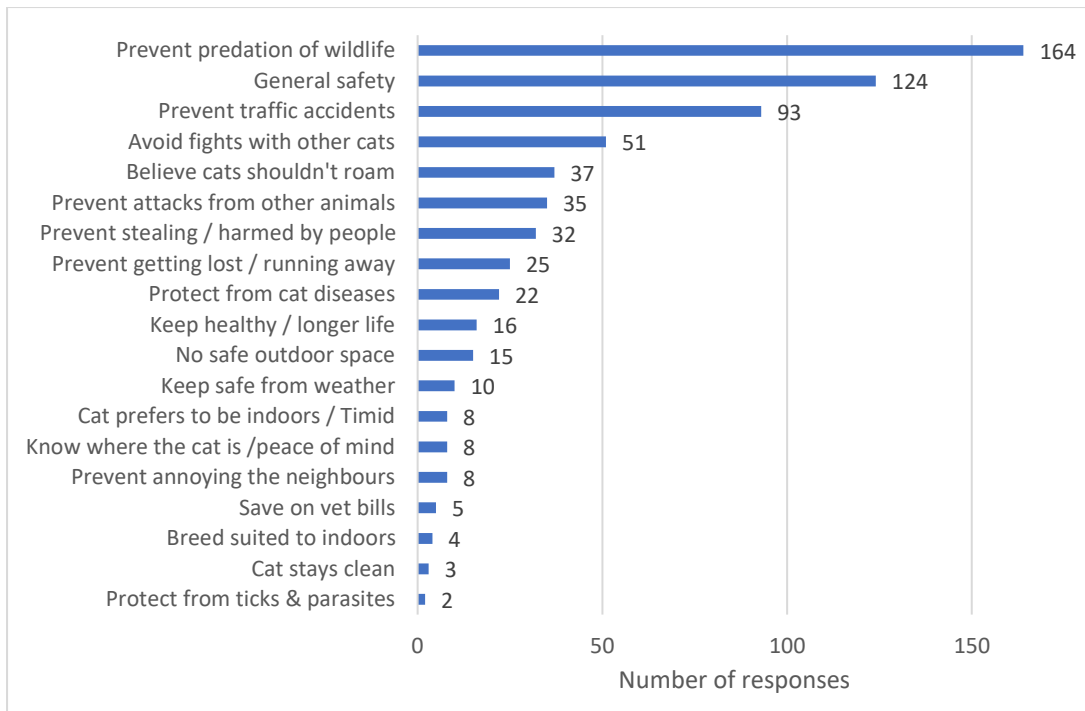


Figure P1. Main factors considered by cat owners when preventing their cat from roaming freely.

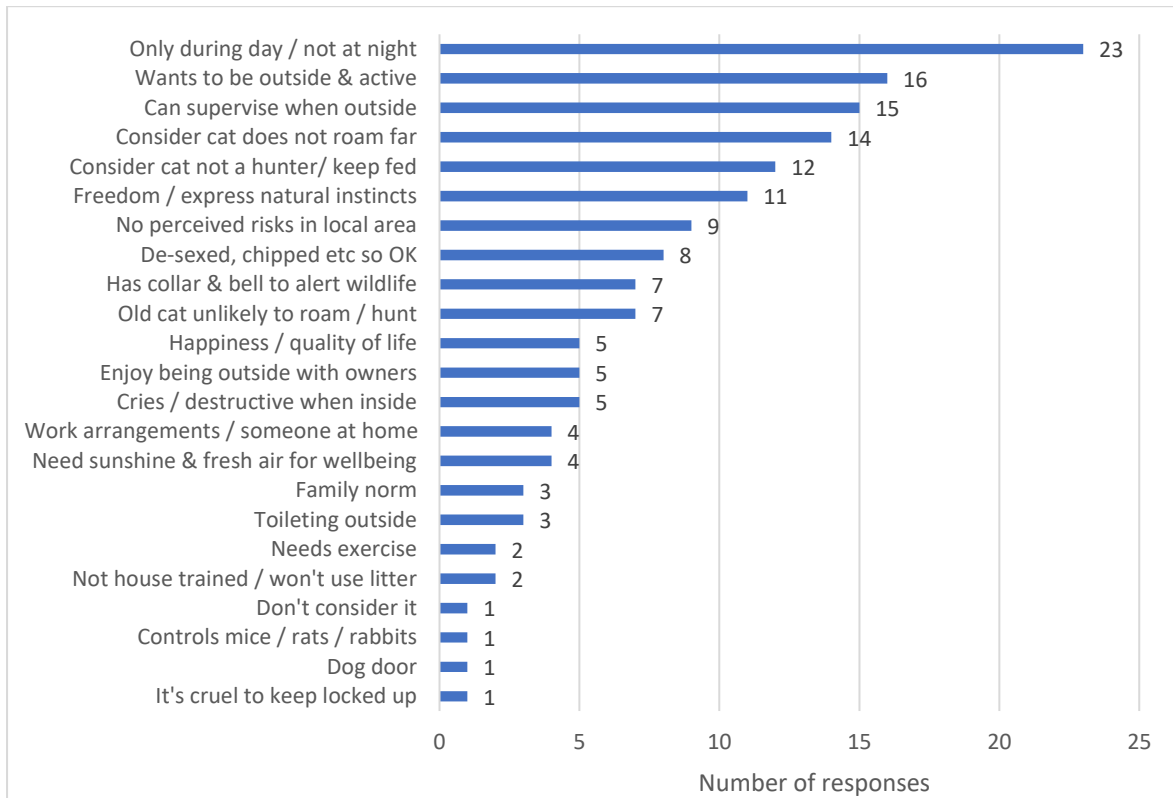


Figure P2. Main factors considered by cat owners when deciding to allow their cat to roam freely.

The listed factors considered by cat owners when deciding to allow their cat to roam freely are shown in Figure P2. The top response was the time of day – cats should be prevented from roaming at night, but it was OK during the day. The next popular responses were that their cat preferred to be outside and active, that the owners was able to supervise them when they were outside and the perception that their cat doesn't roam very far from their property.

After listing their own considerations, cat owners were then asked to rate their agreement with 15 statements pertaining to previously identified drivers of and barriers to preventing cats from roaming freely (See Q7 in Appendix 5). The average ratings are summarised in Figure P3.

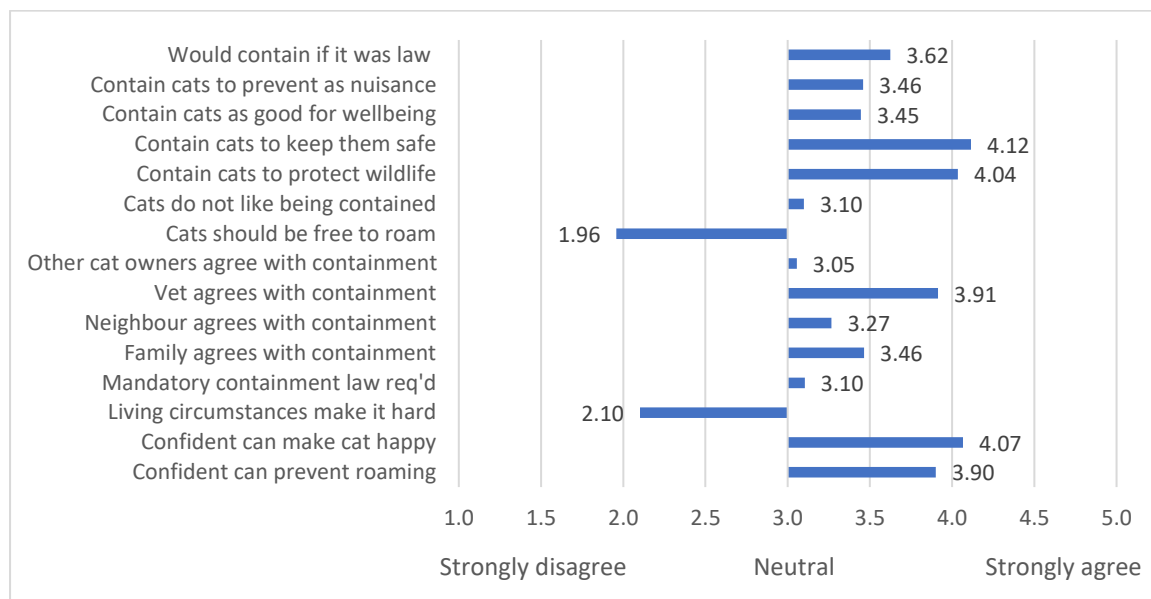


Figure P3. Mean cat owner agreement scores to the 15 driver and barrier statements.

Most cat owners were confident they could provide everything to ensure their cat was happy. Most respondents disagreed that their current residential circumstances made it hard to prevent their cat from roaming, however there was a statistical difference in this agreement rating and respondent's type of dwelling ($F=8.79, p<0.001$), with owners in flats (some outside space 1.50, no outside space 1.20) or other circumstances (1.25) more likely to disagree than those in houses (with yard 2.46, no yard 2.21) and semi-detached or townhouses (with garden 2.67, no garden 2.49). There was also a statistical difference in this agreement rating and the own / rent situation ($F=4.33, p=0.01$), with respondents renting (1.85) more likely to disagree than those owning (2.26).

Keeping cats safe and protecting wildlife were the strongest drivers of cat containment. On average respondents disagreed that cats should be free to roam, however there were statistical differences ($F=47.16, p<0.001$) between those owners who currently restrict their cat's movements (Inside all the time 1.68, Inside & restricted outside 1.43), practice a night curfew (2.45) or let their cats roam freely (Inside & free outside 3.53, Free outside all the time 5.00).

Those respondents who did not own cats were also to rate their agreement with 10 statements pertaining to previously identified drivers of and barriers to preventing cats from roaming freely. The average ratings are shown in Figure P4. There were statistical differences between the ratings of cat owners and non-owners for six of the ten shared statements. Those respondents who do not own cats were more likely to agree that cats should be prevented from roaming to protect wildlife ($F=21.64, p < 0.001$), to prevent them being a nuisance ($F=39.23, p < 0.001$) and to improve the cat's well-being ($F=5.55, p=0.02$). They were less likely to agree that cats should be free to roam ($F=21.71, p < 0.001$). These respondents also were more likely to agree that their family ($F=30.18, p < 0.001$) agreed with cat containment, and that the laws should be changed ($F=62.05, p < 0.001$).

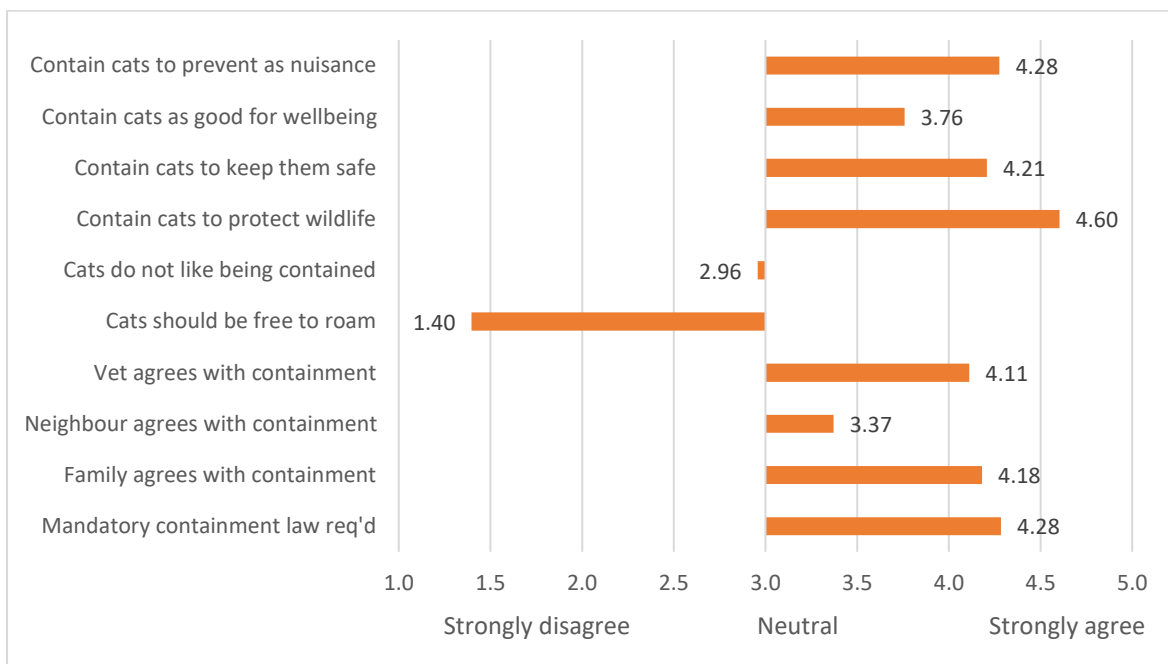


Figure P4. Mean non-cat owner agreement scores to ten driver and barrier statements.

Key Findings (Online Survey)

The adoption of responsible cat ownership behaviours across the Parramatta LGA is influenced by the capacity and motivation of the cat owners. Current cat owner management behaviours and identified driver and barrier factors from the public consultation are summarised below.

- There is some support for full containment (42% currently keeping cats indoors all the time and 28% restricted outdoor access). Twenty percent of cat owners only allow their cats to roam freely during the day, and the remaining 20% let their cats roam freely all the time. Encouragement is required to increase containment rates.
- There are a number of residents, particularly cat owners, who feed stray and unowned cats.
- Main drivers for containment were to reduce wildlife predation and keep the cats safe.
- Strong barriers to full containment were owners' different perceptions of the risks at night versus those at day, as well as their beliefs about the needs and behaviours of their cats.
- There was weak agreement by cat owners that the introduction of cat containment legislation would motivate compliance. Those residents that do not own cats strongly agreed with this legislation change.

Shoalhaven City Council

Baseline cat data

The Shoalhaven City Council reported they had:

- 11,994 registered cats
- 9663 microchipped cats

The number of de-sexed cats was unknown.

Current cat management initiatives

The Council conducts microchipping days and all animals adopted from their Animal Shelter are de-sexed. They strongly recommend 'responsible cat ownership', including cat containment. Some estates and new developments within Shoalhaven City Council have restrictive covenants, where the keeping of cats on private properties is prohibited.

Compliance monitoring

As part of compliance monitoring this Council cross-checks entries in the Companion Animal Register to access information regarding those cats not registered and / or de-sexed. Owners are contacted individually as well as in a monthly mailout, advising them of the Council's requirements. Shoalhaven indicated they do not monitor the areas where the keeping of cats on private properties is prohibited.

Information

The Shoalhaven City Council has information outlining cat owner responsibilities, cat control programs and further resources available on their website, as well as a flyer and brochure which can be handed out by rangers. The animal shelter and rangers provide one on one education.

Nuisance cats

Once a nuisance cat complaint is received, if the cat owner is known a ranger can visit them to provide education. The public can hire traps from the Animal Shelter where they can also take the trapped cat. Flyers are available for complainant to do a letter box drop in their neighbourhood.

Stray and feral cats

Feral and stray cats are known to exist, but the problem is undetermined. Occasional management at the waste depot is conducted by the local shooting club.

What the Council thought was working well

The Council representative was unable to answer the question about what was working well with their current cat management initiatives.

Challenges to effective cat management

The main challenges of cat management identified by Shoalhaven City Council:

- Not knowing the scope of the problems – i.e., how many feral, semi-owned and owned but not microchipped or desexed cats are in the community
- How many cats are allowed to roam day or night and what is the toll on wildlife

- Understanding what cat owners know about responsible pet ownership.

Future intentions

The main identified future cat management intention was to increase the effort by a range of stakeholders to create solutions to the cat problems.

Stakeholder Interview Results

Involvement in cat management

A range of stakeholders from the Shoalhaven LGA were interviewed. Their roles and activities related to cat management:

- **RSPCA Shoalhaven Volunteer Branch:** Rehome cats and kittens, cover costs of health checks, de-sexing, vaccinating and microchipping.
- **Berry vet clinic:** Cats make up 15% of the small animal case load. The clinic has the tender for Shoalhaven pound and works closely with council.
- **Birdlife:** Not directly involved in management of cats but have worked on campaigns to protect birds, and wildlife from cats.

What stakeholders' thought was working well

Stakeholders were asked what was working well for cat management in their local LGA. The main factor identified by the stakeholders was a Council that was proactive on cats and working with animal welfare groups - de-sexing and rehoming programs as well as financial assistance for health care.

Challenges to effective cat management

The main challenges to effective cat management identified by the stakeholders:

- Large number of cats being abandoned/lost/not microchipped and left to breed
- Reports of people allowing their cats to breed freely and selling illegally and limited power of Rangers to enter these properties.

Cat management vision

Aim of cat management

Stakeholders were asked what the aim of cat management should be in their LGA. There was consensus among the stakeholders that the main aims should to de-sex more cats and encourage 24-hour containment.

Required information and actions

Stakeholders were asked what information and actions are required to manage cats more effectively in their local LGA. Their responses:

- Free de-sexing campaign
- Education on how cats affect wildlife and solutions to avoid having cats outside

- Keeping cats inside the properties 24 hours or not have cats at all
- Incentives for people who are doing the right thing
- Resources for council/ranger services to set up a meeting with a 'problem' owner and talk about options and support
- Educate vets about cat containment so they are giving up-to-date advice.

How to deal with conflict

Stakeholders were asked about the best ways to deal with conflicts that arise around cat management in their communities. Their suggestions:

- Education is the best way to deal with conflict, in a firm and friendly manner
- Clear legislation and guidelines with ramifications for those who do not follow them as an incentive to do the right thing
- Community forums/discussion nights, surveys, discussion with local veterinary hospitals
- Outreach and knowledge base of the key parties involved – cat owners, veterinarians, environmental groups, local government rangers.

Key Findings (Interviews)

How domestic cat management is being handled is influenced by the capacity and motivation of both the Council and the community. The main benefits of current programs and challenges for the Shoalhaven City LGA are summarised below.

- Continued work with welfare agencies on de-sexing and rehoming programs as well as financial assistance for health care.
- Greater understanding of the scope of the problem is required by Council and stakeholders to develop better management strategies.

Online survey

Shoalhaven City Council was not one of the selected LGAs targeted with the phone survey, however residents were invited to have their say via the online survey.

Respondent demographics

- 595 respondents completed the online survey – 271 (46%) were cat owners and 324 (54%) did not own a cat.
- Most cat owners were female (231, 85%), with 32 males (12%). Three cat owners identified as non-binary, and five did not answer this question.
- Most non-cat owners were also female (210, 65%), with 106 males (33%) and eight non-responses.
- The overall average age was 55.0 years (± 14.2). The average age for cat owners was younger – 50.3 years (± 13.5), and non-cat owners was older – 59.0 years (± 13.6).

Cat ownership behaviours

Just over half of respondents (n=143, 53%) had one cat in their household, 93 (34%) owned two cats, 22 (8%) owned three cats and ten (4%) owned four cats. The remaining 1% owned five or more cats, the greatest number reported was eight cats in a household.

Keeping cats indoors all the time was the most common cat living arrangement (n=99, 37%). The next most popular arrangements were allowing cats indoors and restricting their outdoor access (n=83, 31%) and keeping cats inside at night but letting them roam freely during the day (n=67, 25%). Twenty respondents (7%) let their cat indoors and allowed them to roam free when outside. Two respondents had cats that roamed freely outside all the time.

Feeding of free roaming cats

Respondents were asked if they cared for any free-roaming cats that were not their own. Sixteen respondents indicated they did care for unowned free-roaming cats - ten cat owners (4%) and six non-cat owners (2%).

Drivers and barriers to cat containment

Cat owners were given the opportunity in an open-ended format to list the factors they have considered when deciding whether to allow their cat to roam freely or not. At least one factor was listed by 246 (91%) of cat owners. The main factors listed by the respondents when preventing their cat from roaming freely are shown in Figure S1. Protecting wildlife, such as small mammals, birds, and reptiles, was the most popular response. General safety and preventing traffic accidents were the next popular.

The listed factors considered by cat owners when deciding to allow their cat to roam freely are shown in Figure S2. The top response was that the owners considered that their cat did not roam far from their property. The next popular response was they were able to supervise their cat when it was outdoors. The cat preferring to be outside and active and that the cat posed no risk to wildlife as it had a collar and bell were next most popular considerations.

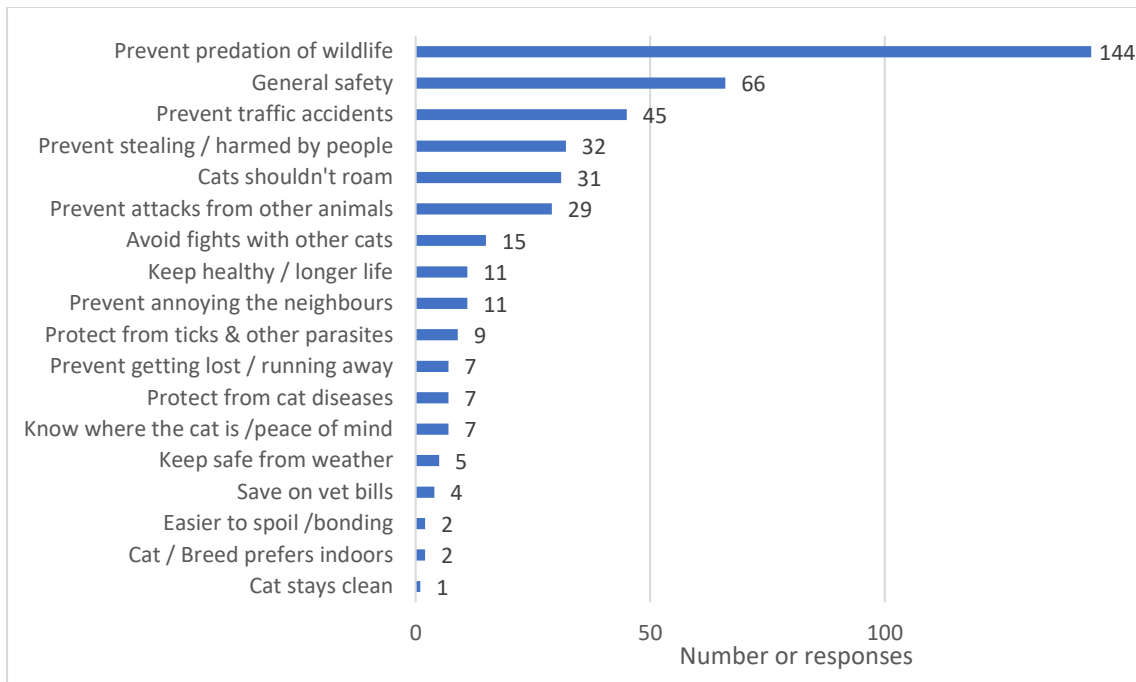


Figure S1. Main factors considered by cat owners when preventing their cat from roaming freely.

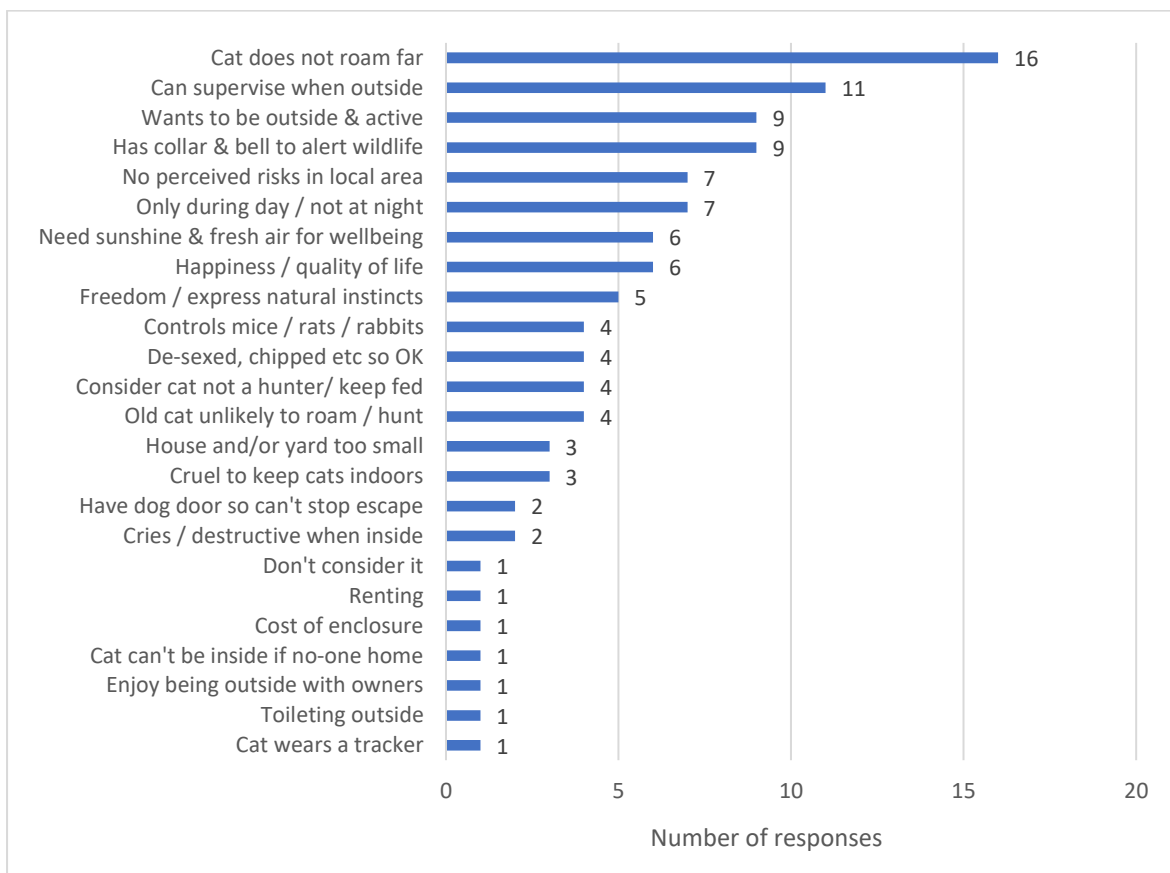


Figure S2. Main factors considered by cat owners when deciding to allow their cat to roam freely.

After listing their own considerations, cat owners were then asked to rate their agreement with 15 statements pertaining to previously identified drivers of and barriers to preventing cats from roaming freely (See Q7 in Appendix 5). The average ratings are summarised in Figure S3.

Most respondents were confident they could provide everything to ensure their cat was happy. Most respondents disagreed that their current living circumstances made it difficult to prevent their cat from roaming. There were no statistical differences in this agreement rating and respondent's type of dwelling ($F=1.24, p=0.29$) or own / rent situation ($F=3.00, p=0.06$).

Protecting wildlife and keeping cats safe were the strongest drivers of cat containment. This corresponds with the results from the open-ended question (Figure S1). On average respondents disagreed that cats should be free to roam, however there were statistical differences ($F=22.76, p<0.001$) between those owners who currently restrict their cat's movements (Inside all the time 1.39, Inside & restricted outside 1.42), practice a night curfew (2.61) or let their cats roam freely (Inside & free outside 2.55, Free outside all the time 3.50).

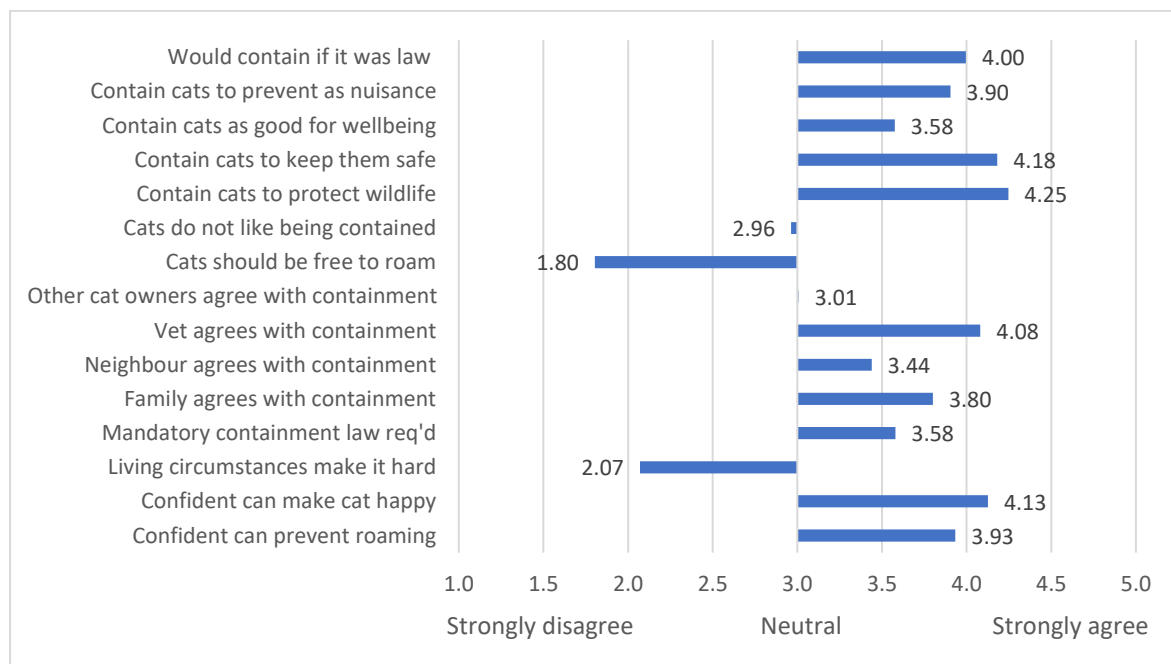


Figure S3: Mean cat owner agreement scores to the 15 driver and barrier statements.

Those respondents who did not own cats were also to rate their agreement with 10 statements pertaining to previously identified drivers of and barriers to preventing cats from roaming freely. The average ratings are shown in Figure S4. There were statistical differences between the ratings of cat owners and non-owners for five of the ten shared statements. Those respondents who do not own cats were more likely to agree that cats should be prevented from roaming to protect wildlife ($F=8.94, p=0.003$) and to prevent them being a nuisance ($F=36.05, p<0.001$). They were less likely to agree that cats should be free to roam ($F=65.57, p<0.001$). These respondents were also more likely to agree that their family ($F=37.33, p<0.001$) supported cat containment, and that the laws should be changed ($F=94.71, p<0.001$).

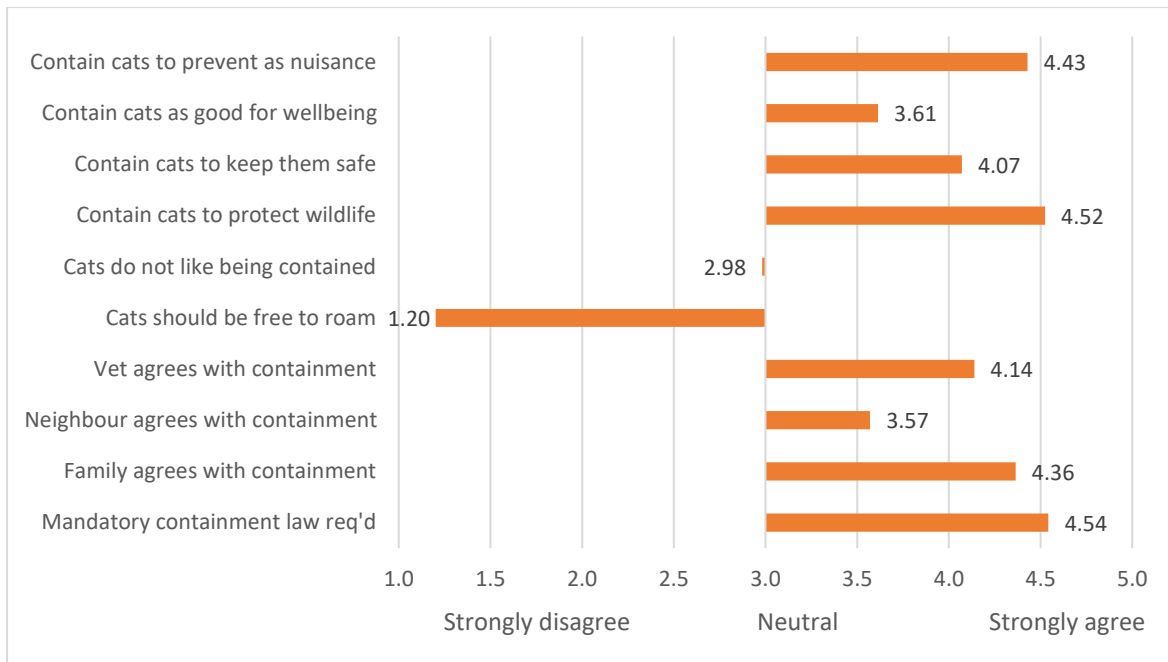


Figure S4. Mean non-cat owner agreement scores to ten driver and barrier statements.

Key Findings (Surveys)

The adoption of responsible cat ownership behaviours across the Shoalhaven LGA is influenced by the capacity and motivation of the cat owners. Current cat owner management behaviours and identified driver and barrier factors from the public consultation are summarised below.

- There is some support for full containment (37% currently keeping cats indoors all the time and 31% restricted outdoor access) and night curfews (currently 25% adoption). Further encouragement is required particularly for the remaining cat owners who pose no restrictions on their cats' movements.
- There is a small number of residents who care for stray and unowned cats.
- Main drivers for containment were to reduce wildlife predation and keep the cat safe.
- Strong barriers to full containment were owners' beliefs about their cats' behaviours and their ability to control it.
- Family members and vets were seen as important influencers for containment adoption.
- There was strong agreement that a cat containment legislation should be introduced, particularly by non-cat owners, and cat owners agreed that it would motivate compliance.

Tweed Shire Council

Council Interview Results

Baseline cat data

The Tweed Shire Council reported from July 2014 they have:

- 6153 registered cats
- 3108 microchipped cats
- 2363 de-sexed cats.

Current cat management initiatives

Tweed Shire Council undertakes a range of cat management initiatives. There are two estates within the LGA that have curfew (dawn to dusk) covenants on their titles. The Council recommends cat containment as part of 'responsible cat ownership'. The Council offers subsidised de-sexing and microchipping programs.

The NSW Companion Animals Act 1998 allows Councils to declare Wildlife Protection Areas (WPAs). Tweed has designated three bushland reserves as WPAs where both dogs and cats are prohibited.

Compliance monitoring

As part of compliance monitoring this LGA cross-checks entries in the Companion Animal Register to access information regarding those cats not registered and / or de-sexed. Owners are contacted, advising them of the Council's requirements. Tweed Council rangers patrol and monitor key locations, including WPAs. Trail cameras have been placed in strategic locations to assist with monitoring compliance, and cage trapping is implemented in areas with low levels of voluntary compliance.

Information

The Tweed Shire Council have developed their 'Love Cats Love Wildlife' campaign and conduct a range of community engagement programs, local school presentations, and workshops on responsible pet ownership. They conduct a 'Secret life of cats' tracking project. Tweed also hosts an interactive website for people to view lost/impounded animals and post for lost pet information.

Nuisance cats

Nuisance cat complaints are investigated and actioned by the Council rangers.

Stray and feral cats

Tweed Shire Council is currently aware of semi-owned/ unowned cat populations in several areas and engages with all relevant stakeholders to try to improve the welfare of these cats. Captured semi-owned/ unowned cats that have been reported by the community are rehomed through the volunteer organisation 'Friends of the Pound' (FOP) where possible.

What the Council thought was working well

Tweed LGA believe the total cat exclusion (cats prohibited) on several estates is one of their current cat management initiatives that is working well.

Challenges to effective cat management

The main challenges of cat management identified by this LGA:

- Low levels of registration and microchipping
- Low levels of containment
- Lack of legislative power for enforcement.

Future intentions

Identified future cat management intentions:

- Reforming current legislation to include mandatory containment which would provide a clear regulatory framework.

Stakeholder Interview Results

Involvement in cat management

Only two stakeholders from the Tweed LGA were interviewed. Their role and activities related to cat management:

- **Murwillumbah vet:** GP vet. Working with Tweed Shire Council on Love Cats Love Wildlife project. Strong interest in behaviour and enrichment
- **North Coast Local Lands Service:** Work under the NSW Biosecurity Act to manage feral or stray cats in rural areas. Work with Council to handle collected cats.

What stakeholders' thought was working well

The stakeholders were asked what was working well for cat management in their local LGA.

The main factors identified:

- The Love Cats Love Wildlife campaign which has been effective at bringing cat containment to people's attention
- Multiple contact points with cat owners – so they hear the same messaging from the vet practice as well as the Council
- Development of the Regional Cat Management plan.

Challenges to effective cat management

The main challenge to effective cat management identified by the stakeholders:

- Getting some vets on board to promote cat containment messaging
- Improving current legislation to support compliance activities by the Council.

Cat management vision

Aim of cat management

The stakeholders were asked what the aim of cat management should be in their LGA. The main aims identified was to increase fulltime containment of cats, not just at night and the creation of a regional ca management plan.

Required information and actions

The stakeholders were asked what information and actions are required to manage cats more effectively in their local LGA. Their responses:

- Highlight to cat owners how containment affects longevity, not just wildlife impacts
- Provide cat owners with information about potential risks to cats from roaming
- Encourage vets to incorporate messaging about containment in their practice mission statements and values
- Incentives for cat owners: FOP have a long-standing low-cost de-sexing program
- Council take charge with community support.

How to deal with conflict

The stakeholder did not offer a response to the question about the best ways to deal with conflicts that arise around cat management in their communities.

Key Findings (Interviews)

How domestic cat management is being handled is influenced by the capacity and motivation of both the Council and the community. The main benefits of current programs and challenges for the Tweed Shire LGA are summarised below.

- Council's Love Cats Love Wildlife project has been effective at bringing cat containment to people's attention but needs to continue and get all stakeholders involved.
- Programs targeting low levels of registration and microchipping required.
- Current legislation needs to be reformed to include clearer regulatory framework for containment and greater power to enforce.

Phone survey

Respondent demographics

Tweed Shire was one of the LGAs to be targeted with the phone survey. Seventy-one responses were collected. Forty-four respondents (62%) were female, the remaining 38% were male. The average age of respondents was 58 years.

When asked to describe their locality, 41 (58%) indicated they lived in a town, 18 (25%) as semi-rural, and 12 (17%) as rural. Most of the respondents (n=58, 82%) lived in a house with a medium to large outdoor space (yard). Two (3%) lived in a house with only a small outside space (courtyard or small garden). Five (7%) lived in a semi-detached house or townhouse with only a small outside space (courtyard or small garden), and six (8%) lived in a flat or unit with some outside space (patio or balcony). Most of the respondents indicated they owned their dwelling (n=63, 89%), eight were renting (11%).

Adoption of responsible cat ownership behaviours

The majority of respondents (n=52, 73%) had one cat in their household, 16 (23%) owned two cats, two owned three cats, and one had 4 cats.

De-sexing rates were high with 97% of respondents reporting their cats were de-sexed, with one respondent unsure. Registration with the local council was lower at 77%, although nine (13%) of owners were unsure if their cats were registered. Due to an oversight, respondents in this LGA were not asked about microchipping rates.

Keeping cats indoors at night but letting them roam freely during the day was the most common cat living arrangement (n=23, 32%). The next most popular arrangement was keeping cats indoors all the time (n=21, 30%). Eleven respondents (15%) allowed their cat indoors and restricted their outdoor access (e.g. in an escape-proof yard / run, or on a lead), and 15 (21%) let their cat indoors and allowed them to roam free when outside. Only one respondent had a cat that lived outside all the time.

Of the respondents who allowed their cats to roam freely outside (n=39), 33 (85%) indicated that their cat would be likely to some extent be roaming freely in the morning (6am-noon) as well as in the afternoon (noon-6pm), 14 (38%) indicated that their cat would be likely to some extent be roaming freely in the evening (6pm-midnight), while ten (26%) indicated that their cat would be likely to some extent be roaming freely from midnight to dawn.

The respondents who allowed their cats to roam freely outside were asked about their future intentions of preventing their cats from roaming freely. Results are presented in Figure T1. In the future respondents were more likely to prevent their cat roaming more often than they do currently (mean 1.4 where 1= extremely unlikely and 5= extremely likely) or prevent it from roaming freely all the time (mean 1.3) than to install a fence or enclosure (mean 1.1).

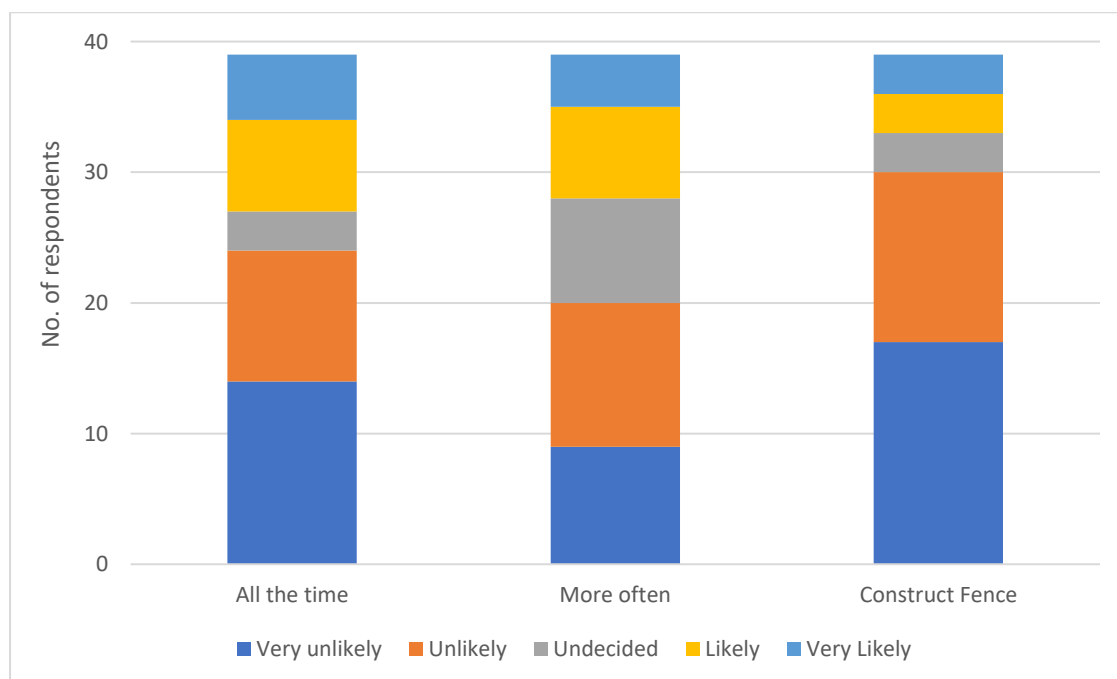


Figure T1. Likelihood of preventing free roaming of cats in the future across Tweed LGA.

Drivers and barriers to cat containment

Respondents were given the opportunity in an open-ended format to list at least three factors they have considered when deciding whether to allow their cat to roam freely or not. Seventy respondents (99%) listed at least one factor. The main factors listed by the respondents when preventing their cat from roaming freely are shown in Figure T2. Protecting wildlife, including small mammals, birds, and reptiles, was the most popular response. Preventing traffic accidents, avoiding fighting with other cats and the belief that cats should not roam were the next common responses.

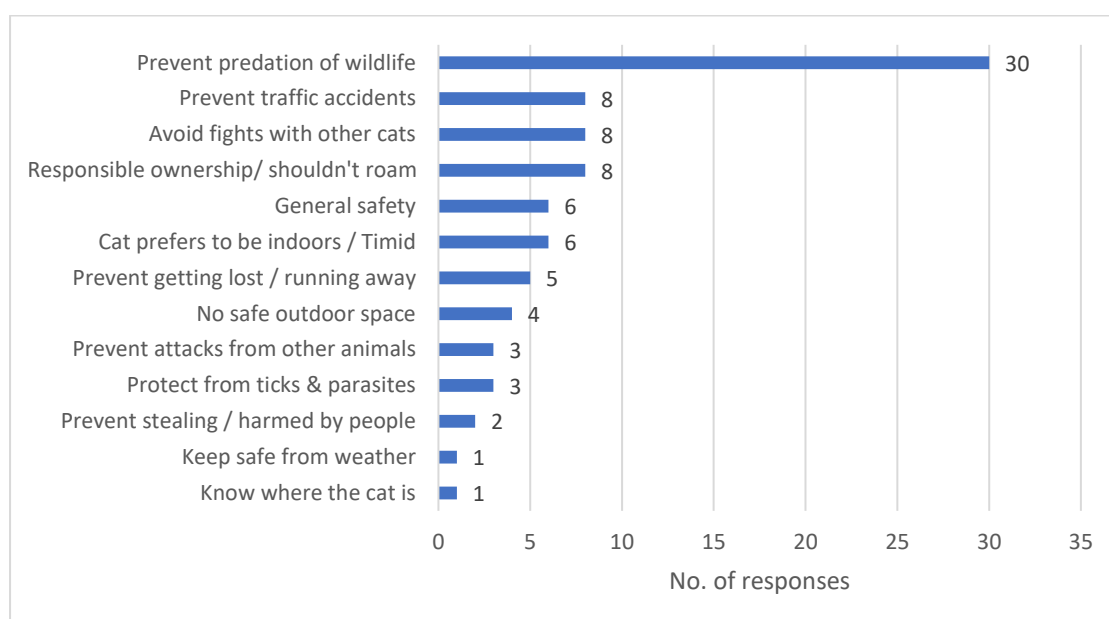


Figure T2. Main factors considered by respondents when preventing their cat from roaming freely.

The listed factors considered by respondents when deciding to allow their cat to roam freely are shown in Figure T3. The consideration of the cat’s personality and its preference for outdoors was the top response, followed by whether the cat was considered to be a hunter and its destructive behaviour if not allowed outside.

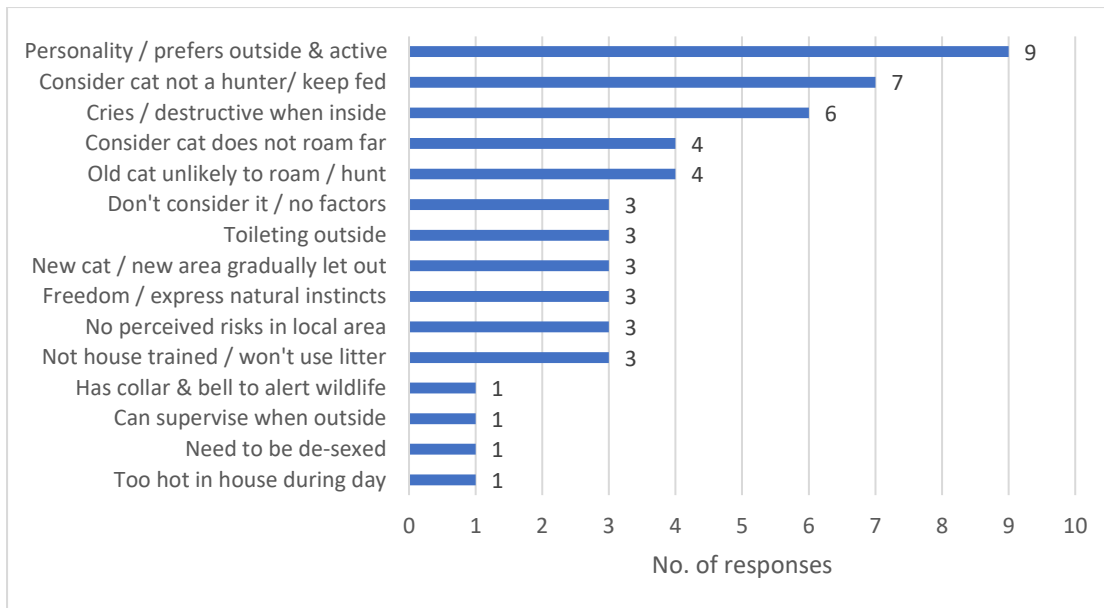


Figure T3. Main factors considered by respondents when deciding to allow their cat to roam freely.

After listing their own considerations, respondents were then asked to rate their agreement with 14 statements pertaining to previously identified drivers of and barriers to preventing cats from roaming freely (See Q5 in Appendix 4). The average ratings are summarised in Figure T4.

Most respondents were confident they could prevent their cat from roaming if they wished to, and they could provide everything to ensure their cat was happy. Most respondents disagreed that their current living circumstances made it difficult to prevent their cat from roaming. There were no statistical differences in this agreement rating and respondent's type of dwelling ($F=0.57, p=0.63$), locality ($F=0.45, p=0.64$) or own / rent situation ($F=0.27, p=0.61$).

Wildlife protection and having support from vets were the strongest drivers of cat containment. This corresponds with the results from the open-ended question (Figure T2). On average respondents disagreed that cats should be free to roam, however there were differences between those owners who currently restrict their cat's movements (Inside all the time 2.52, Inside & restricted outside 2.00), practice a night curfew (1.91) or let their cats roam freely (Free outside all the time 4.00, Inside & free outside 2.47). Owing to the small, unequal sample sizes these differences could not be statistically compared.

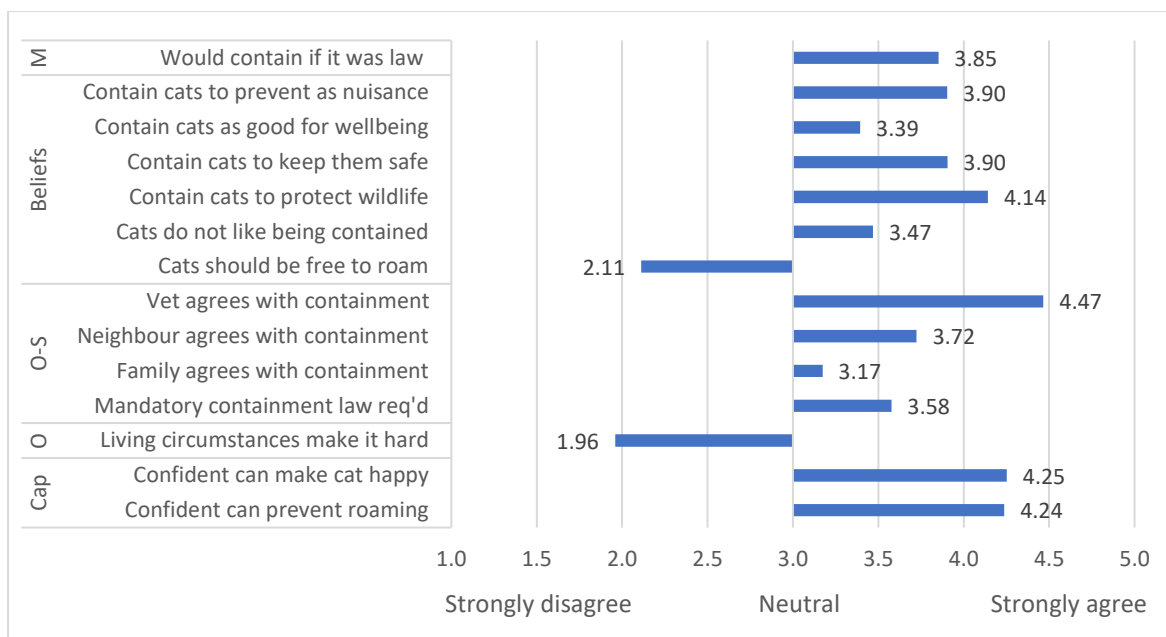


Figure T4. Mean agreement scores to the 14 driver and barrier statements (Cap=Individual capability factors, O=Physical opportunity factor, O-S=Social opportunity factors, Beliefs=Internal motivational factors, M=External motivational factor).

Online survey

Respondent demographics

- 671 respondents completed the online survey – 296 (44%) were cat owners and 375 (56%) did not own a cat.
- Most cat owners were female (252, 85%), with 27 males (9%) and four respondents who identified as non-binary (1%). Thirteen cat owners did not answer this question.
- Most non-cat owners were also female (256, 68%), with 113 males (30%) and one respondent who identified as non-binary. Five non-cat owners did not answer this question.
- The overall average age was 51.2 years (± 14.6). Cat owners were slightly younger (48.7 years ± 14.6) and non-cat owners slightly older (53.2 years ± 14.4).

Cat ownership behaviours

The majority of respondents (n=172, 59%) had one cat in their household, 88 (30%) owned two cats, twenty-three (8%) owned three cats, four (1%) owned four cats and five (1%) indicated they owned five cats or more.

Allowing cats indoors and restricting their outdoor access was the most common cat living arrangement (n=97, 33%). Keeping cats indoors all the time (n=85, 29%) and keeping them indoors at night but letting them roam freely during the day (n=82, 28%) were the next most popular arrangements. Thirty-one owners allowed cat indoors letting them roam free when outside (2%). One respondent reported having a cat that lived outside all the time.

Feeding of free roaming cats

Eleven cat owners (4%) and eleven non-cat owners (3%) indicated they had cared for unowned free-roaming cats.

Drivers and barriers to cat containment

Cat owners were given the opportunity in an open-ended format to list the factors they have considered when deciding whether to allow their cat to roam freely or not. At least one factor was listed by 266 (90%) cat owners. The main factors listed by the respondents when preventing their cat from roaming freely are shown in Figure T5. Protecting wildlife, including small mammals, birds, and reptiles, was the most popular response. General safety and preventing traffic accidents were the next popular.

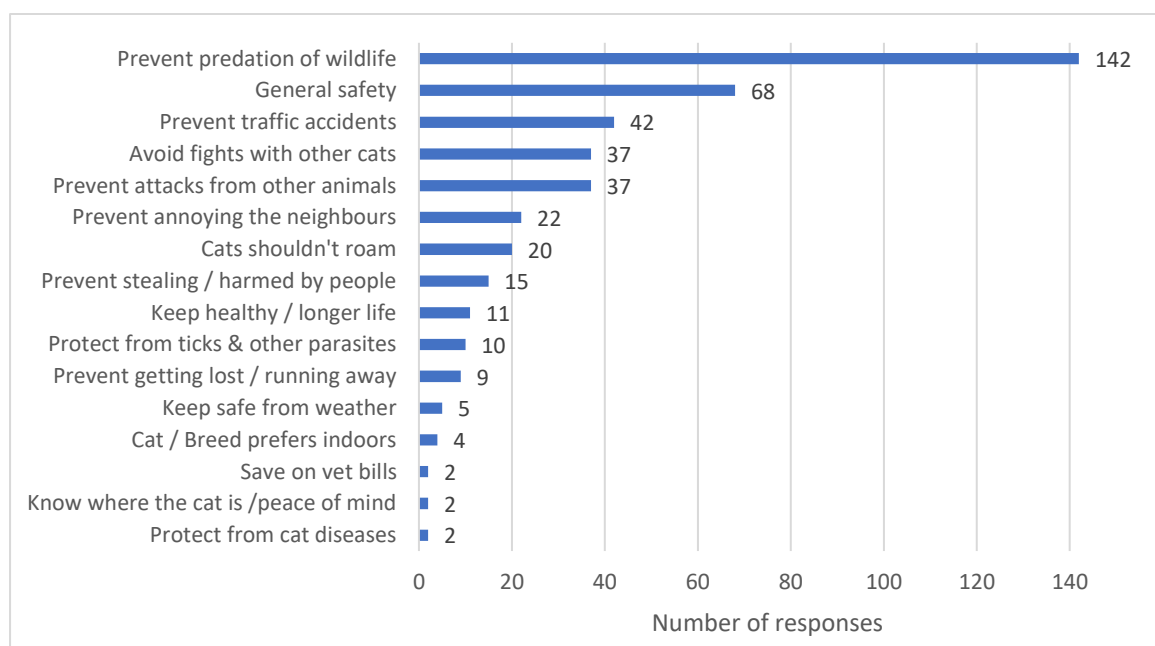


Figure T5. Main factors considered by cat owners when preventing their cat from roaming freely.

The listed factors considered by cat owners when deciding to allow their cat to roam freely are shown in Figure T6. The top response was the time of day – cats were prevented from roaming at night, but it was OK during the day. The perception that their cat doesn't roam very far from their property was the next most popular consideration.

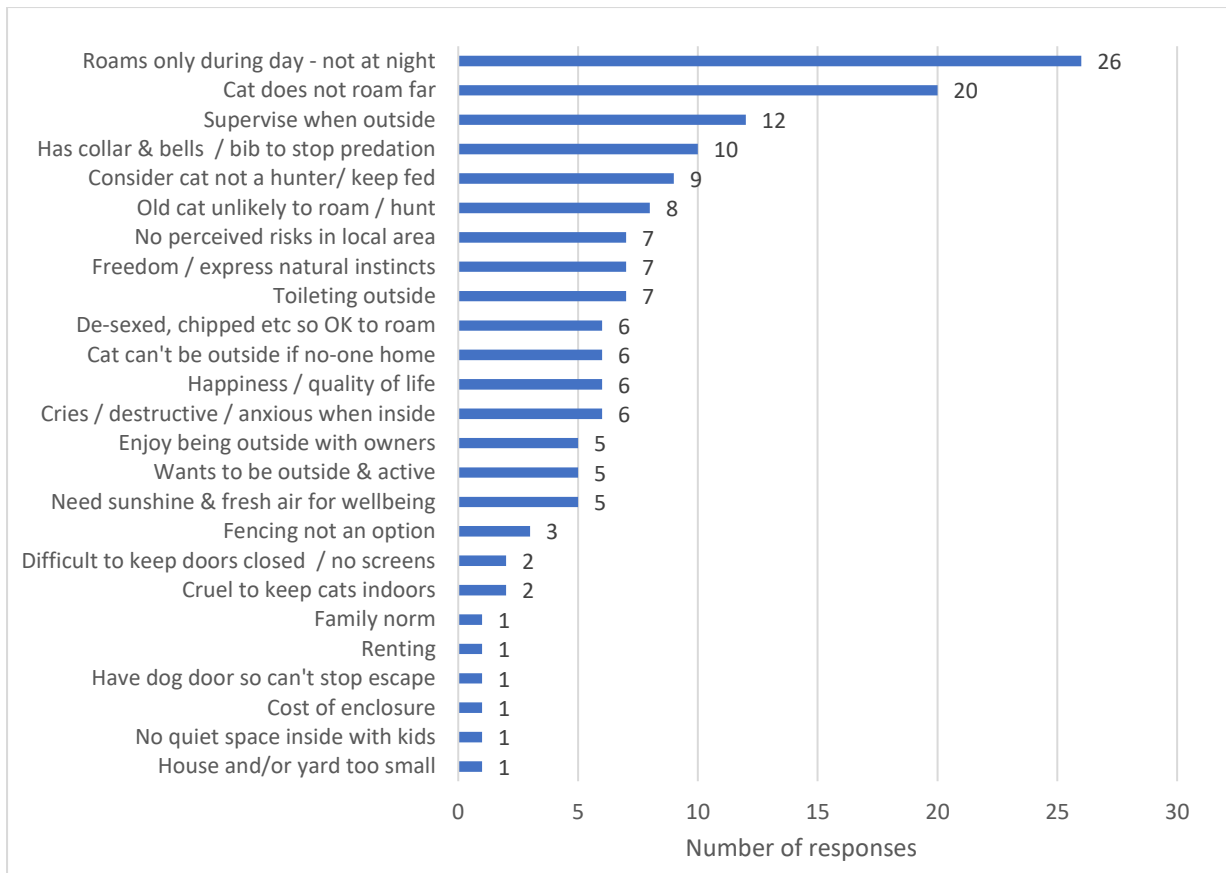


Figure T6. Main factors considered by cat owners when deciding to allow their cat to roam freely.

After listing their own considerations, cat owners were then asked to rate their agreement with 15 statements pertaining to previously identified drivers of and barriers to preventing cats from roaming freely (See Q7 in Appendix 5). The average ratings are summarised in Figure T7.

Online respondents were less confident they could prevent their cat from roaming if they wished to, and they could provide everything to ensure their cat was happy than the phone survey respondents. Most respondents disagreed that their current living circumstances made it difficult to prevent their cat from roaming. There were no statistical differences in this agreement rating and respondent's type of dwelling ($F=1.20, p=0.31$) or own / rent situation ($F=2.07, p=0.13$).

Keeping cats safe and protecting wildlife were the strongest drivers of cat containment. This corresponds with the results from the open-ended question (Figure T5). On average respondents disagreed that cats should be free to roam, however there were statistical differences ($F=23.49, p<0.001$) between those owners who currently restrict their cat's movements (Inside all the time 1.49, Inside & restricted outside 1.48), practice a night curfew (2.32) or let their cats roam freely (Inside & free outside 2.97, Free outside all the time 4.00).

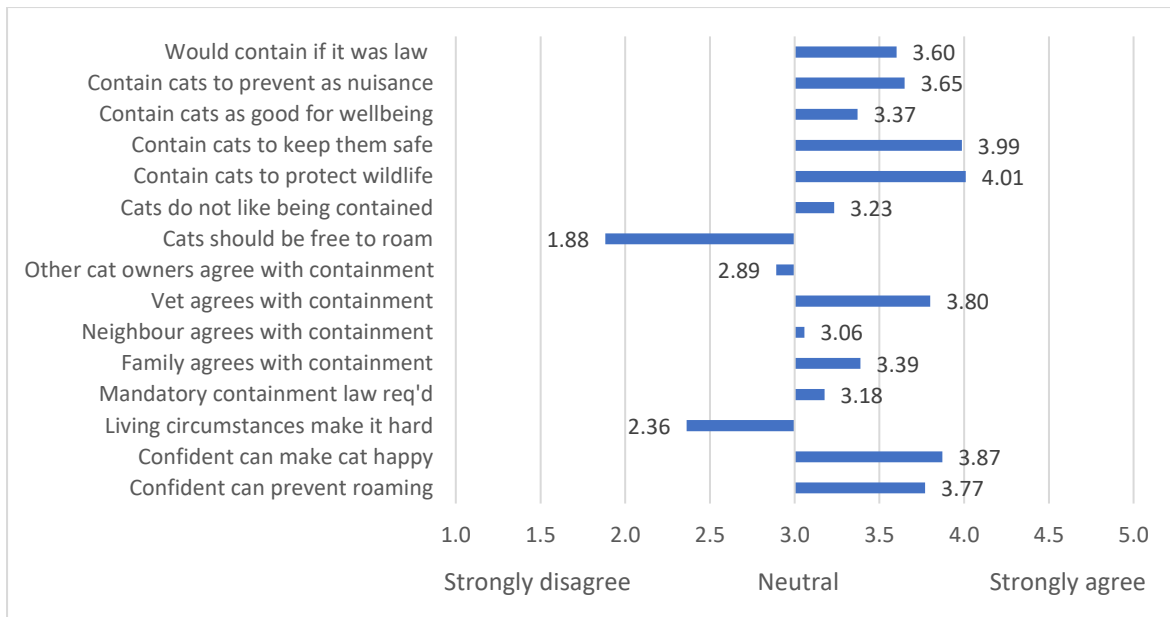


Figure T7. Mean cat owner agreement scores to the 15 driver and barrier statements.

Those respondents who did not own cats were also to rate their agreement with 10 statements pertaining to previously identified drivers of and barriers to preventing cats from roaming freely. The average ratings are shown in Figure T8. There were statistical differences between the ratings of cat owners and non-owners for nine of the ten shared statements. Those respondents who do not own cats were more likely to agree that cats should be prevented from roaming to protect wildlife ($F=94.11, p < 0.001$), to prevent them being a nuisance ($F=85.94, p < 0.001$) and to improve the cat's well-being ($F=10.61, p=0.001$). They were less likely to agree that cats should be free to roam ($F=98.27, p < 0.001$) and that cats disliked being contained ($F=12.28, p < 0.001$). These respondents also were more likely to agree that their family ($F=133.47, p < 0.001$), neighbours ($F=36.22, p < 0.001$) and vets ($F=34.42, p < 0.001$) supported cat containment, and that the laws should be changed ($F=204.77, p < 0.001$).

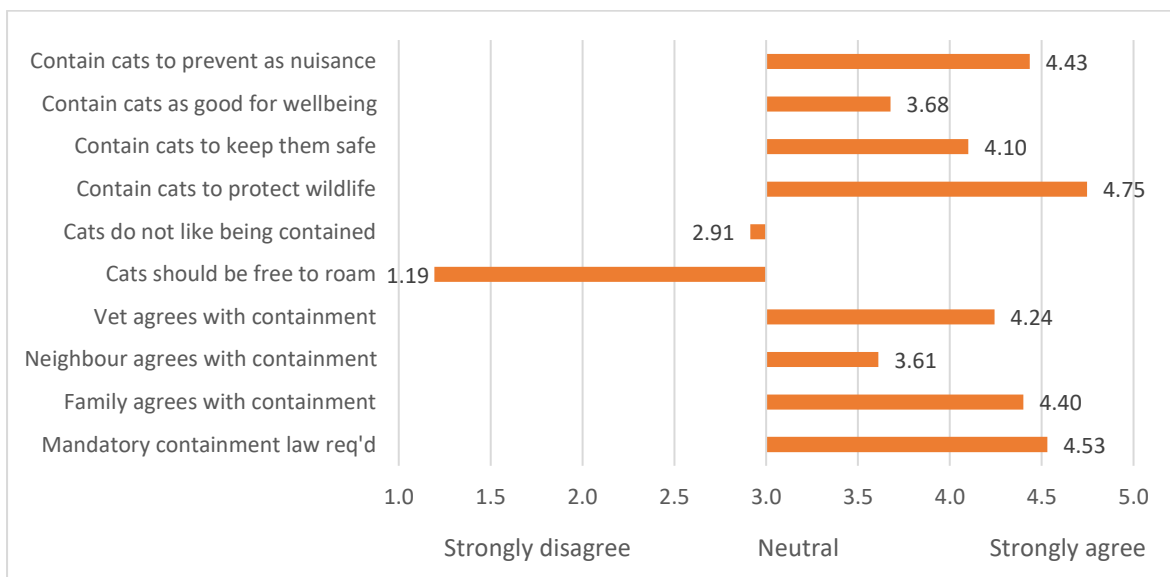


Figure T8. Mean non-cat owner agreement scores to ten driver and barrier statements.

Key Findings (Surveys)

The adoption of responsible cat ownership behaviours across the Tweed LGA is influenced by the capacity and motivation of the cat owners. Current cat owner management behaviours and identified driver and barrier factors from the public consultation are summarised below.

- Reported de-sexing rates were reasonable but microchipping and registration of cats need to be improved.
- There is support for night curfews (between 28-32% adoption), as well as full containment (between 28-30% adoption of indoors all the time and 15-33% restricted outdoor access). Around 6-20% of cat owners pose no restrictions on their cats' movements.
- There is a small number of residents who care for stray and unowned cats.
- The main drivers for containment were to reduce the impact on wildlife, keep cats safe as well as reduce the nuisance caused to neighbours.
- Strong barriers to full containment were owners' perceptions of the risks of wildlife predation at night versus that during day and beliefs about the needs and behaviours of their cats.
- Vets were seen as important influencers for containment adoption.
- There was some agreement by cat owners that the introduction of cat containment legislation would motivate compliance. Those residents that do not own cats strongly agreed with this legislation change.

Walgett Shire Council

Baseline cat data

The Walgett Shire Council reported they had 635 registered, microchipped and desexed cats.

Current cat management initiatives

The Council conducts subsidised de-sexing programs in association with the RSPCA. They strongly recommend 'responsible cat ownership', including cat containment.

Compliance monitoring

The Council currently does not cross-check entries in the Companion Animal Register to monitor information regarding those cats not registered and / or de-sexed in their LGA.

Information

Walgett Shire Council offer a handout on responsible cat ownership and verbal education on the impact of roaming cats.

Nuisance cats

The LGA conducts a trapping program to determine if the nuisance cat is a pet or feral. If identifiable, the owners are contacted.

Stray and feral cats

There are several known locations in the LGA where feral cats reside and are fed by residents. These are managed through extensive trapping of public and private property.

What the Council thought was working well

The Council was asked what was working well with their current cat management initiatives. Their response:

- De-sexing programs conducted with the RSPCA
- Educating people on a one-to-one basis.

Challenges to effective cat management

The main challenges of cat management identified by Walgett Shire Council:

- Minimal containment of cats
- Cat owners' lack of capacity to contain their cat
- Feeding of stray cats.

Future intentions

The identified future cat management intentions:

- Educational material targeting rural areas
- Tougher legislation on keeping cats safe at home.

Stakeholder Interview Results

The Darriwa Elders Group, an important stakeholder group in the Walgett LGA, was interviewed.

What stakeholders' thought was working well

These stakeholders are currently not directly involved in cat management activities so were unable to answer this question on what was working well.

Challenges to effective cat management

The main challenges to effective cat management identified by the Darriwa Elders Group:

- Lots of stray cats in town and on the Reserves that are tolerated and sometimes feed (perception that control rodents and snakes)
- Low de-sexing rate
- Lack of connection between disappearing wildlife and increased cat numbers.

Cat management vision

Aim of cat management

This stakeholder group was asked what the aim of cat management should be in their LGA. There was consensus that the main aims should be to improve knowledge around what to do about stray cats and the impact cats have on wildlife.

Required information and actions

The information and actions are required to manage cats more effectively in their local LGA:

- GPS tracking or video collars on some cats to demonstrate what some of the cats have been getting up to
- Use local social media to share educational material.

How to deal with conflict

There were no suggestions on the best ways to deal with conflicts that arise around cat management in their communities.

Key Findings (Interviews)

How domestic cat management is being handled is influenced by the capacity and motivation of both the Council and the community. The main benefits of current programs and challenges for the Shoalhaven City LGA are summarised below.

- The de-sexing programs conducted with the RSPCA are beneficial but more needs to be done to improve the low de-sexing rate.
- Minimal containment of cats in LGA so require educational material and behaviour change strategies suitable for rural areas. Offering support to those cat owner who do not have the capacity to contain their cats will be important.
- Lots of stray cats in town and on the Reserves so approaches to reduce these population and change feeders' behaviour.

Online survey

Walgett Shire Council was not one of the selected LGAs targeted with the phone survey, however residents were invited to have their say via the online survey.

Respondent demographics

- 13 respondents completed the online survey – 9 (69%) were cat owners and 4 (31%) did not own a cat.
- Seven of the cat owners were female (78%), one was male, and one did not answer this question.
- Three of the non-cat owners were female (75%), and one was male.
- The overall average age was 42.9 years (± 13.6). The average age for cat owners was younger – 38.9 years (± 12.7), and non-cat owners was older – 52.0 years (± 12.5).

Cat ownership behaviours

A third of the cat owners ($n=3$) had one cat in their household, three (33%) owned two cats, 2 (22%) owned three cats and one (11%) owned four cats.

Three cat owners kept their cats indoors all the time (33%), two kept their cats inside at night but let them roam freely during the day (22%), one allowed their cats indoors and restricted their outdoor access (11%) and one (11%) let their cat indoors and allowed them to roam free when outside. Two respondents had cats that roamed freely outside all the time.

Feeding of free roaming cats

Only one respondent, a cat-owner, indicated they cared for unowned free-roaming.

Drivers and barriers to cat containment

Cat owners were given the opportunity in an open-ended format to list the factors they have considered when deciding whether to allow their cat to roam freely or not. All cat owners listed at least one factor. The main factors listed by the respondents when preventing their cat from roaming freely are shown in Figure W1. Protecting wildlife, including small mammals, birds, and reptiles, was the most popular response. Preventing attacks from other animals such as dogs and snakes and preventing traffic accidents were the next popular. The five listed factors considered by cat owners when deciding to allow their cat to roam freely are also shown in Figure W1.

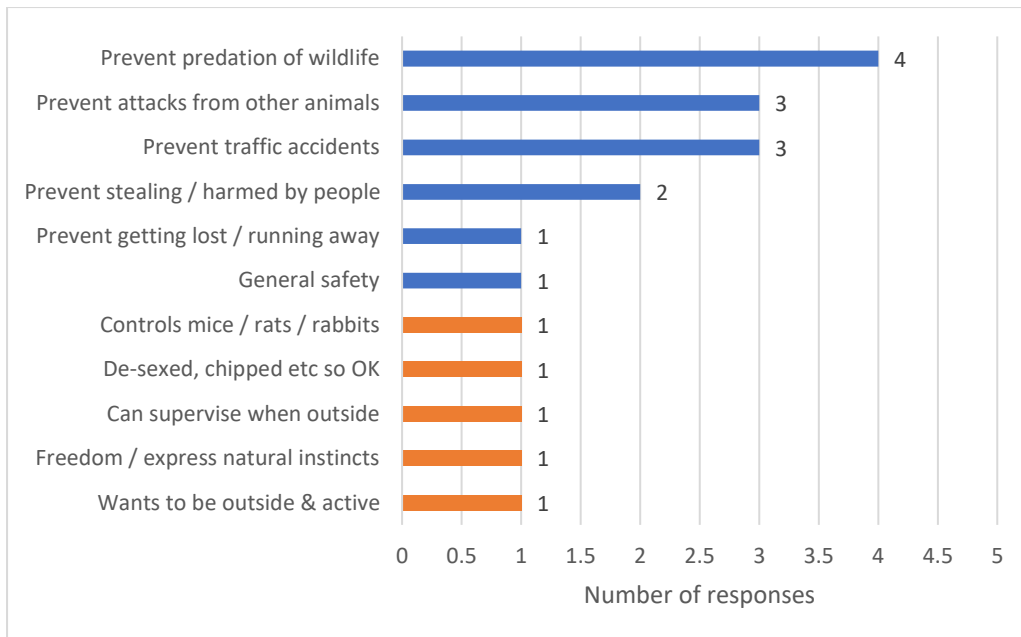


Figure W1. Main factors considered by cat owners when preventing their cat from roaming freely (top six factors in blue) and when deciding to allow their cat to roam freely (bottom five factors in orange).

After listing their own considerations, cat owners were then asked to rate their agreement with 15 statements pertaining to previously identified drivers of and barriers to preventing cats from roaming freely (See Q7 in Appendix 5). The average ratings are summarised in Figure W2. Most cat owners were confident they could provide everything to ensure their cat was happy. The perception that cats do not like to be contained was a strong barrier to cat containment.

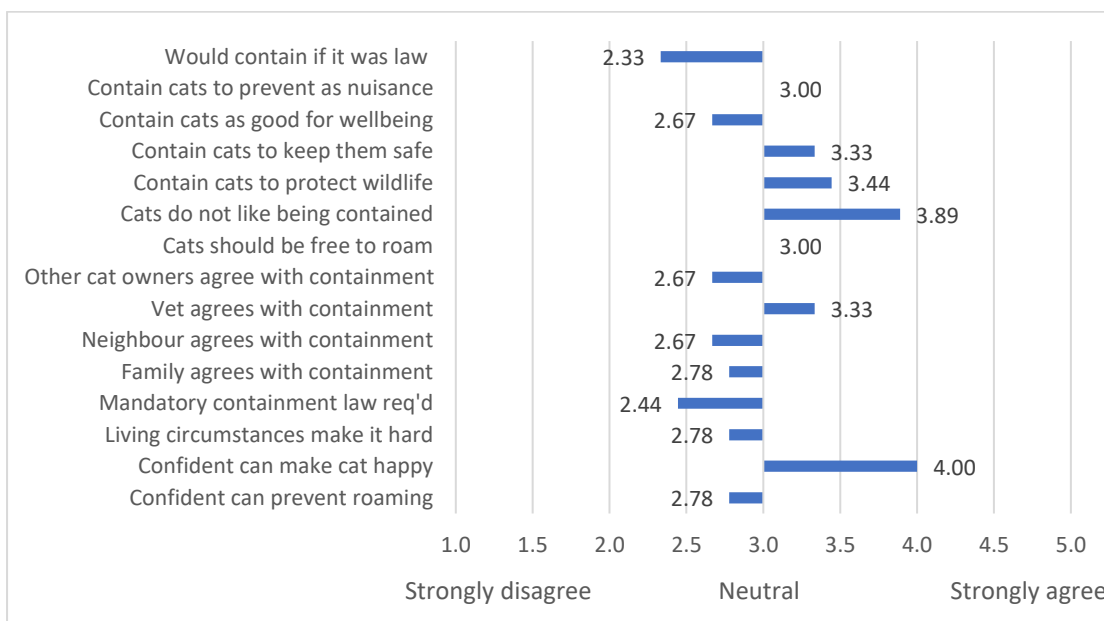


Figure W2. Mean cat owner agreement scores to the 15 driver and barrier statements.

The four respondents who did not own cats were also to rate their agreement with 10 statements pertaining to previously identified drivers of and barriers to preventing cats from roaming freely. The average ratings are shown in Figure W3. Although there was not a big enough sample to compare statistically, these respondents were more likely to agree that cats should be prevented from roaming to protect wildlife, to prevent them being a nuisance, to keep cats safe and to improve the cat's well-being. They were less likely to agree that cats should be free to roam. These respondents also were more likely to agree that their family and neighbours supported cat containment, and that the laws should be changed.

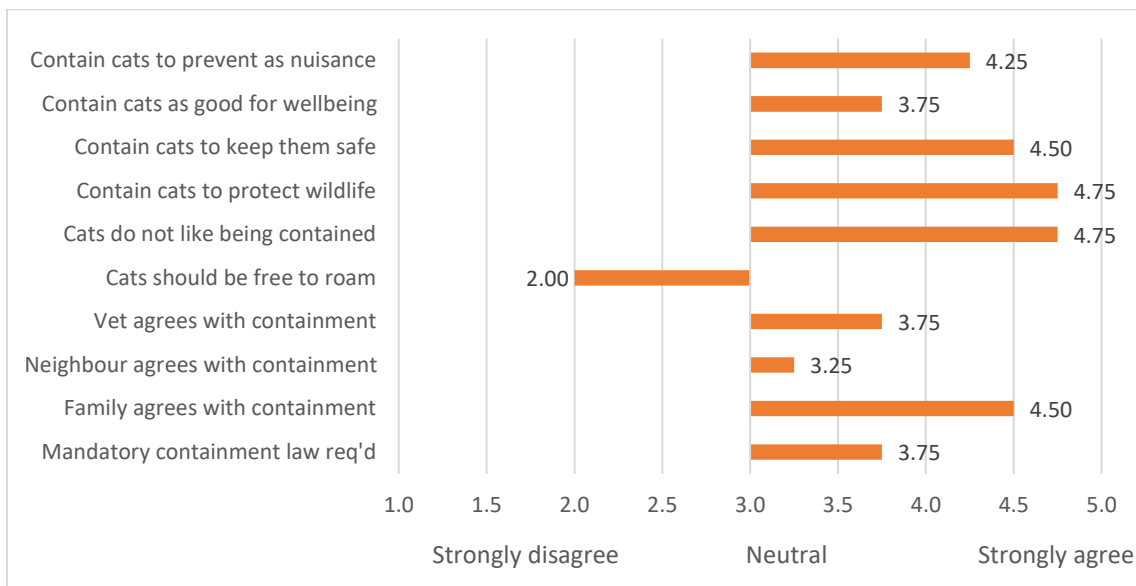


Figure W3. Mean non-cat owner agreement scores to ten driver and barrier statements.

Key Findings (Surveys)

The adoption of responsible cat ownership behaviours across the Walgett LGA is influenced by the capacity and motivation of the cat owners. Current cat owner management behaviours and identified driver and barrier factors from the public consultation are summarised below.

- There is some support for full containment (33% currently keeping cats indoors all the time and 11% restricted outdoor access) and night curfews (currently 22% adoption). Further encouragement is required particularly for the remaining cat owners who pose no restrictions on their cats' movements.
- Important barriers for containment are the belief that cats do not like to be contained and owners' confidence in preventing their cat from roaming.
- There is a small number of residents who care for stray and unowned cats.
- Cat owners perceive a lack of important social influencers for containment adoption.
- The introduction of cat containment legislation would unlikely motivate compliance.

Weddin Shire Council

Baseline cat data

The Weddin Shire Council reported they had:

- <5% of cats registered
- 5% microchipped cats

The number of de-sexed cats was unknown.

Current cat management initiatives

In their Locals Order Policy for the Keeping of Animals, Weddin Shire Council recommends that no more than two cats are kept per household, along with 'responsible cat ownership', including cat containment, particularly at night.

Compliance monitoring

As part of compliance monitoring this Council cross-checks entries in the Companion Animal Register to access information regarding those cats not registered. Owners are contacted advising them of the Council's requirements.

Information

The Council provides information and media releases on legislative requirements, "Nuisance Cat" Order, responsible cat ownership, consequences on having a roaming cat and statistics surrounding damage caused by a roaming cat.

Nuisance cats

Once a nuisance cat complaint is received, owner of cat is initially contacted and educated in relation to responsible cat ownership. Traps to private property owners are offered to catch feral/wild cats.

Stray and feral cats

There is a known problem of dumping of unwanted litters in the LGA. No management currently conducted.

What the Council thought was working well

The Council representative was unable to answer the question about what was working well with their current cat management initiatives.

Challenges to effective cat management

The main challenges of cat management identified by Weddin Shire Council:

- Availability and affordability of kittens - easily replaced
- Limitation of current legislation
- The inability to capture and impound a cat
- Lack of responsible ownership behaviour and lack of owners admitting the cat is theirs

Future intentions

The main identified future cat management intention was to obtain the funding to increase microchipping and de-sexing rates.

Stakeholder Interview Results

Involvement in cat management

A range of stakeholders from the Weddin LGA were interviewed. Their roles and activities related to cat management:

- **Lachlan Valley Vet:** Main clinic in Forbes, only in Grenfell one day per week, mainly de-sexing and vaccinations. Cats probably 40% of that practice. Some work with Council.
- **A community member:** Concerned about the impact of cats on wildlife. Regularly traps and kills cats on his property. Will euthanise surrendered cats from other locals.

What stakeholders' thought was working well

Stakeholders were asked what was working well for cat management in their local LGA. The main factor identified by the stakeholders was the low-cost de-sexing and reminders for new kitten owners by the vet practice.

Challenges to effective cat management

The main challenges to effective cat management identified by the stakeholders:

- Lack of awareness and misconceptions about de-sexing
- Cost of accessing desexing due to limited vet services
- Large population of non-managed cats at rubbish tip.

Cat management vision

Aim of cat management

Stakeholders were asked what the aim of cat management should be in their LGA. There was consensus among the stakeholders that the main aims should be to increase access to and uptake of desexing and encourage containment of cats.

Required information and actions

Stakeholders were asked what information and actions are required to manage cats more effectively in their local LGA. Their responses:

- Offering free de-sexing is a great idea - but putting at least a small price (e.g. \$10) is preferable as people perceive the service (and the animal) as having a value
- Provide resources to vets on prepubertal de-sexing for cats
- Promote the good cat owners who do contain their cats as an example to others in the area
- Best way to communicate is through the local paper (as older demographic)
- Provide educational resources to children through the local school.

How to deal with conflict

Stakeholders did not have any suggestions to deal with conflicts that arise around cat management in their communities.

Key Findings (Interviews)

How domestic cat management is being handled is influenced by the capacity and motivation of both the Council and the community. The main benefits of current programs and challenges for the Weddin LGA are summarised below.

- Low-cost de-sexing and reminders for new kitten owners by vet practice is working well but more work required to increase awareness and address misconceptions about de-sexing.
- Funding to increase microchipping and de-sexing and greater access to vet services is required.
- Council lacks capacity to manage large population of stray cats at the tip and enforce current legislation.

Online survey

Weddin Shire Council was not one of the selected LGAs targeted with the phone survey, however residents were invited to have their say via the online survey.

Respondent demographics

- 143 respondents completed the online survey – 56 (39%) were cat owners and 87 (61%) did not own a cat.
- Most cat owners were female (41, 73%), with 11 males (20%). One cat owner identified as non-binary, and three did not answer this question.
- Most non-cat owners were also female (45, 52%), with 38 males (44%). One non-cat owner identified as non-binary, and three did not answer this question.
- The overall average age was 51.5 years (± 15.9). The average age for cat owners was younger – 48.3 years (± 15.5), and non-cat owners was older – 53.4 years (± 15.9).

Cat ownership behaviours

Most of the cat owners (n=32, 58%) had one cat in their household, 17 (31%) owned two cats, and five (9%) owned three cats. The remaining 2% owned four or more cats, the greatest number reported was six cats in a household.

Nineteen respondents (35%) let their cat indoors and allowed them to roam free when outside. Twelve respondents (22%) reported keeping their cats indoors all the time and another twelve (22%) kept their cats indoors and allowed restricted outdoor access. Nine respondents (16%) kept their cats inside at night but let them roam freely during the day and three (5%) had cats that roamed freely outside all the time.

Feeding of free roaming cats

Respondents were asked if they cared for any free-roaming cats that were not their own. Nine respondents indicated they did care for unowned free-roaming cats – seven cat owners (13%) and two non-cat owners (2%).

Drivers and barriers to cat containment

Cat owners were given the opportunity in an open-ended format to list the factors they have considered when deciding whether to allow their cat to roam freely or not. At least one factor was listed by 48 (86%) of cat owners. The main factors listed by the respondents when preventing their cat from roaming freely are shown in Figure WE1. Protecting wildlife, including small mammals, birds, and reptiles, was the most popular response. General safety, preventing traffic accidents and avoiding fights with other cats were the next popular.

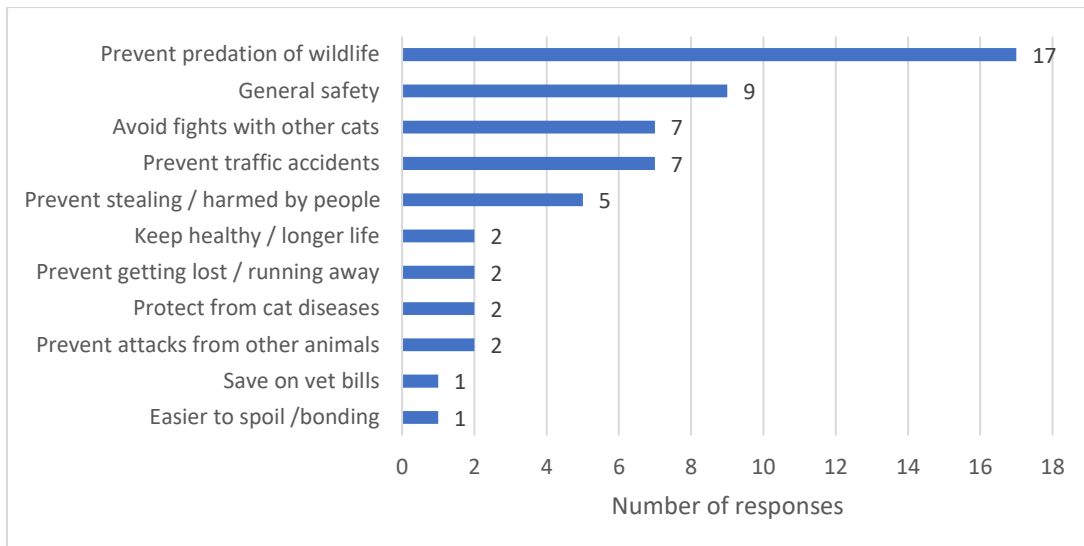


Figure WE1. Main factors considered by cat owners when preventing their cat from roaming freely.

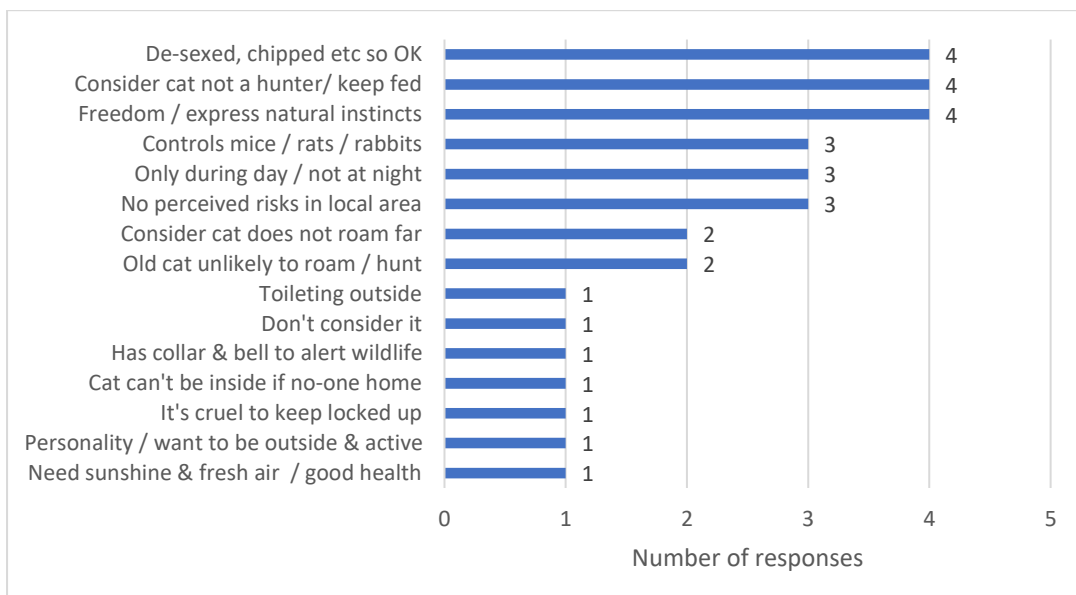


Figure WE2. Main factors considered by cat owners when deciding to allow their cat to roam freely.

The listed factors considered by cat owners when deciding to allow their cat to roam freely are shown in Figure WE2. The top responses were that owners did not consider their cat was a hunter, the cats were desexed and / or microchipped so the owners perceived it was OK to let them roam, and that cats should be allowed to roam as it was their instinct.

After listing their own considerations, cat owners were then asked to rate their agreement with 15 statements pertaining to previously identified drivers of and barriers to preventing cats from roaming freely (See Q7 in Appendix 5). The average ratings are summarised in Figure WE3.

Most cat owners were relatively confident they could provide everything to ensure their cat was happy. Keeping cats safe was the strongest drivers of cat containment. There was not much support for a change in containment laws. On average respondents disagreed that cats should be free to roam, however there were statistical differences ($F=6.39, p<0.001$) between those owners who currently restrict their cat's movements (Inside all the time 1.67, Inside & restricted outside 2.08), practice a night curfew (2.56) or let their cats roam freely (Inside & free outside 3.26, Free outside all the time 4.67).

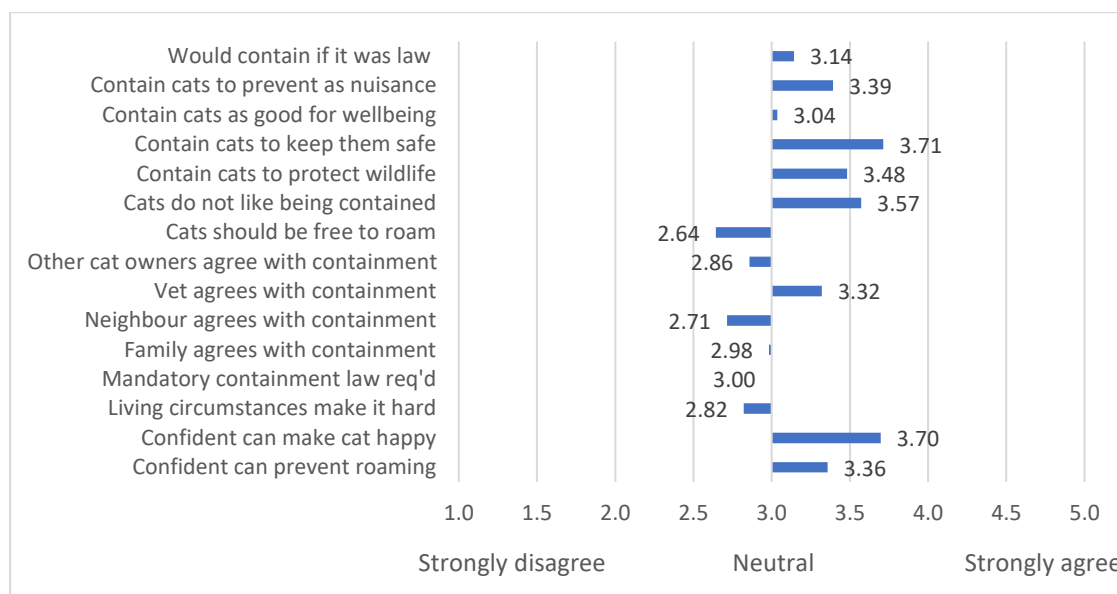


Figure WE3. Mean cat owner agreement scores to the 15 driver and barrier statements.

Those respondents who did not own cats were also to rate their agreement with 10 statements pertaining to previously identified drivers of and barriers to preventing cats from roaming freely. The average ratings are shown in Figure WE4. Although there was not a big enough sample to compare statistically, these respondents were less likely than the cat owners to agree that cats should be able to roam where they please and cats do not like containing, and more likely to agree with all the other factors.

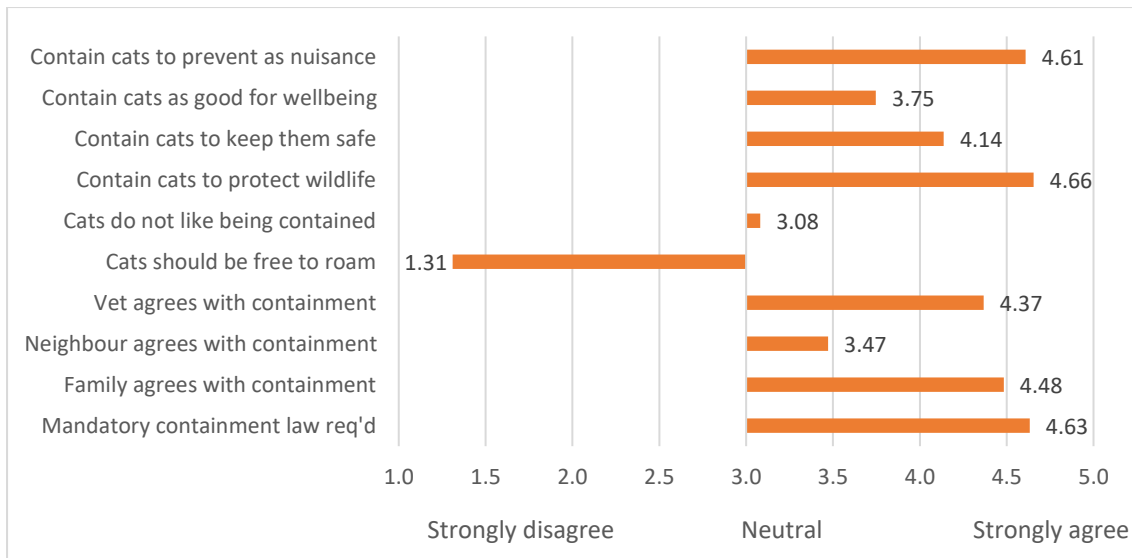


Figure WE4. Mean non-cat owner agreement scores to ten driver and barrier statements.

Key Findings (Surveys)

The adoption of responsible cat ownership behaviours across the Weddin LGA is influenced by the capacity and motivation of the cat owners. Current cat owner management behaviours and identified driver and barrier factors from the public consultation are summarised below.

- Most cat owners let their cats roam freely all the time (41%) or during the day (night curfews 16%). There is some support for full containment (21% currently keeping cats indoors all the time and 21% restricted outdoor access), however further encouragement is required.
- There is a small number of residents who care for stray and unowned cats.
- Main drivers for containment were to reduce wildlife predation and reduce nuisance behaviour.
- Owners' perception of their cats' needs, and behaviour pose major barriers to cat containment.
- There was strong support from non-cat owners for a change in legislation, however there was little agreement by cat owners that the introduction of cat containment legislation would motivate compliance.

General Stakeholder Consultation

A number of broader-based stakeholder organisations and individuals were also interviewed. These stakeholders operated within selected LGAs, but also across other LGAs and States.

Involvement in cat management

These stakeholders' roles and activities related to cat management:

- **Cat Protection Society:** Rescue cats and kittens and find them a home. Work with councils, vets and other organisations to provide accessible veterinary services: registering, de-sexing, microchipping.
- **Inner City Strays:** Re-home kittens and cats from Sydney City area streets.
- **Cat Harness Australia:** Provide cat owners confidence, equipment and education on responsible cat ownership.
- **Catnets:** Sell nets and products to cat owners so they can build their own cat enclosures. Promote and educate in responsible cat ownership.
- **Sydney Wildlife:** Rescue and rehabilitate wildlife (see the harm that cats can do). Operates across all areas of Sydney. Offer advice about responsible cat ownership & have a leaflet on installing the Catmax Cleamet Enclosure.
- **Threatened Species Recovery Hub:** Synthesise research findings into a range of resources for various target audiences. Engage with Councils and Vets.
- **Canberra Street Cat Alliance:** Cat rescue organisation – manage colonies, conduct TNR programs, and re-home cats and kittens.
- **RSPCA Victoria:** Runs 'safe cat safe wildlife' program. Coordinates outreach programs e.g. Mildura loves pets, which provides free de-sexing, microchipping and vaccination to all residents using a voucher system through local vets.
- **Landcare NSW:** Not directly involved in cat management but have groups across NSW and seen the impacts that cats have on wildlife.
- **NSW NPWS:** Enforcement of NPW Act, BCA and Regulations regarding domestic animals in National Parks.

What stakeholders' thought was working well

These stakeholders were asked what was working well for cat management in their local LGA. Their responses:

- Interagency cooperation between Councils and Welfare groups with de-sexing and re-homing programs
- Cooperation with colony carers, TNR approach to managing semi-owned and unowned cat populations
- Messaging around keeping cats safe and positive social media stories of responsible cat ownership
- Establishment in some areas of cat management plans which may include mandatory cat containment provisions
- Having good relationships with vets, and in some instances providing them with training and equipment to make sure they can work safely with unsocialised cats
- Having good people / rangers on the ground with good rapport with local community.

Challenges to effective cat management

The main challenges to effective cat management identified by the stakeholders:

- People not de-sexing their cats and dumping their kittens.
- Lack of education about caring for pets properly
- Belief that cats are wild and should be outside
- The lack of government laws to force owners to keep their cats indoors
- Cat colonies at the back of businesses - reliance in industrial areas for rodent control
- Establishing relationships between stakeholder groups.

Cat management vision

Aim of cat management

Stakeholders were asked what the aim of cat management should be in their LGA. There was consensus among these stakeholders that the main aims should be:

- Responsible pet ownership – microchipping, registration, de-sexing and keeping cats contained to owner property
- Reduction of street cat numbers to zero
- Eliminate the number of native animals killed or injured by cats.

Required information and actions

Stakeholders were asked what information and actions are required to manage cats more effectively in their local LGA. Their responses:

- Education on responsible cat ownership and incentives for de-sexing and keeping cats contained
- Change in the legislation and lots of de-sexing campaigns
- Remove all barriers to enable cat owners to de-sex their cats including registration fees and transportation
- Provide excellent customer service so that people accessing free de-sexing have a positive experience
- Advise on how to keep cats inside their properties
- Develop companion animal management plan
- Education for children in schools
- More frequent ranger patrols to enforce of the Companion Animals Act and communication by council that there all be more frequent patrols and there will be penalties given rather than just warnings.

How to deal with conflict

Stakeholders' suggestions for dealing with conflict that arises around cat management in local communities:

- Don't blame cats for everything
- Think about how ramifications of actions e.g., 24-hour containment may cause people who don't like cats to take matters in their own hands when they see a roaming cat in the street and hurt the cat
- Consider people who don't have the ability or resources to keep their cats contained
- Clarify 'stray' category in legislation
- People who support cats and people who support wildlife have to meet halfway – cat night curfew is good halfway point
- Involving all local stakeholder especially vets and rescue organisations
- Ensuring the quality of care provided it is of high standard, not cutting corners because the service is free.

References

- Hine, D. W., Kormos, C., & Marks, A. D. G. (2016). Agree to Disagree. A practical guide to conducting survey research in environmental psychology. In R. Gifford (Ed.), *Research methods for environmental psychology* (pp. 71-91). West Sussex, UK.: John Wiley & Sons Ltd.
- Hine, D. W., McLeod, L. J., & Driver, A. B. (2019). *Designing behaviour change interventions for invasive animal control: A practical guide*. Canberra, Australia: Centre for Invasive Species Solution.
- Legge, S., Woinarski, J. C. Z., Dickman, C. R., Murphy, B. P., Woolley, L.-A., & Calver, M. C. (2020). We need to worry about Bella and Charlie: the impacts of pet cats on Australian wildlife. *Wildlife Research*, 47(8), 523-539. doi:10.1071/WR19174
- McLeod, L. J., Hine, D. W., & Driver, A. B. (2019). Change the humans first: Principles for improving the management of free-roaming cats. *Animals*, 9(8), 555. doi:10.3390/ani9080555
- Michie, S., Atkins, L., & West, R. (2014). *The behaviour change wheel. A guide to designing interventions*. UK: Silverback Publishing.
- Woinarski, J. C. Z., Legge, S., & Dickman, C. (2019). *Cats in Australia. Companion and killer*. Clayton South, VIC: CSIRO Publishing.

Appendices

Appendix 1: Behaviour Change Strategies

Appropriate behaviour change strategies for the identified driver and barrier factors are detailed in Table A1.

Note that the LGAs will not be able to tackle all identified leverage points at once and will need to prioritise. It not wise to try and change too many behaviours at once – people may be overwhelmed and disengage completely.

Table A1: Linking identified COM drivers and barriers to appropriate behaviour change tools to promote adoption of responsible cat ownership (RPO) in the selected LGAs (after Hine, McLeod, & Driver, 2019).

COM Factor	Focus of intervention	Recommended behaviour change tools
Capability		
Awareness of local roaming cat issues	Promote awareness of local roaming cat issues and promote the role that RPO and stray /feral cat management plays in resolving the problem.	Provide factual information on roaming cat issues and management activities in the local area across a range of communication channels.
Awareness of RPO requirements	Promote awareness of the requirements of RPO.	Provide information on RPO requirements across a range of communication channels.
Awareness of where to get assistance - RPO / nuisance cats	Promote awareness of how to get help.	Provide information on available sources of assistance and how people can access across a range of communication channels.
Skills in training pet cats	Establish and improve physical skills, support and improve cognitive skills.	Provide targeted training material and workshops on various training techniques. Offer advice and support participation.
Opportunity		
Owners-can't afford de-sexing	Modify the environment to reduce the cost.	Offer subsidies for de-sexing. Cooperate with other stakeholders as required. Provide timely prompts to encourage participation.
Owners-can't access RPO requirements	Modify the environment to make it easier.	Offer increased access to de-sexing and microchipping activities. Cooperate with other stakeholders as required.
Owners-can't afford / access containment options	Modify the environment to make it possible, easier and affordable.	Offer options and increased access for people with different circumstances – e.g., rentals, different outdoor spaces, different planning requirements.
Owners-deal with unwanted animals	Encourage participation in desired action (surrender & de-sexing) and discourage undesired actions (i.e. dumping).	Increase the availability of places and make it easier to surrender unwanted cats and to access de-sexing. Increase social unacceptability of dumping (regulation, peer pressure).
Council-lack of staff / resources	Modify the Council environment to increase support for cat management.	Develop solutions that are socially acceptable to Council management in consultation with the community. Apply for funding from external sources if required.
Council-lack of facilities	Modify the environment to provide required facilities.	Plan and upgrade facilities as required. Develop alternates options.
Council-lack of authority	Modify the environment to increase Council authority.	Develop Council policies and push for improvements in current legislation.
Motivation		
Owners-belief that their cat doesn't roam far or hunt	Improve awareness of cats roaming and hunting behaviour	Demonstrate cats roaming and hunting behaviour using GPS or camera collars or similar technology. Provide information on other similar people's experiences and participation. Use credible community sources that the individual can associate with and trust.
Owners-don't believe in containment, early de-sexing, microchipping or registration	Increase understanding of method. Highlight the positive aspects and dispel any underlying misconceptions. Enforce compliance where possible.	Provide transparent information about method options and consequences so people can compare and make an informed choice. Emphasis correct facts. Provide feedback on other local people's performance and experiences. Use credible community sources that the individual can associate with and trust. Offer advice, encourage and support in a social setting. Adopt a perspective that is linked to the individual's values. Incentivise adoption or enforce compliance with punishments.
Owners-belief that cats are 'cheap' pet	Increase understanding of what owning a cat involves and enhance personal responsibility. Dispel any underlying misconceptions.	Provide information about what other local people and credible sources think about owning pet cats and give feedback about other people's experiences. Adopt a perspective that is linked to the individual's values.
Residents-belief that feeding unowned cats is beneficial	Increase understanding of issue, dispel any misconceptions and enhance personal responsibility.	Provide information of consequences of only feeding and not taking other actions. Clearly describe actions residents should take. Adopt a perspective that is linked to the individual's values and social norms.

Appendix 2: Council survey

Confidential

Page 1

Council Survey

We are seeking your insights into cat management in your council area. Information from this survey, along with insights from other stakeholders including the cat owning and non-cat owning general public will inform the design of the behaviour change project Keeping Cats Safe at Home.

This project aims to reduce impacts of pet cats on wildlife and to increase containment of pet cats to their owner's property.

By completing this survey you are agreeing to us collecting personal information about you for the purposes of this project. Your information will be stored securely and your identity and information will be kept strictly confidential, except as required by law.

If you have any questions or require further information please contact Dr Gemma Ma (0490 431 554, gma@rspcansw.org.au).

Thank you!

This project has been assisted by the NSW Government through its Environmental Trust.

Name

.....

Council

.....

Phone

.....

Email

.....

Please describe your current role

How many pet cats are currently registered in your council area?

.....

How many pet cats are currently microchipped in your council area?

.....

How many of the currently microchipped cats in your council area are desexed?

.....

Does your council monitor compliance with microchipping requirements for cats?

- Yes
- No
- I don't know

Does your council monitor compliance with registration requirements for cats?

- Yes
- No
- I don't know

Does your council monitor compliance with desexing requirements for cats?

- Yes
- No
- I don't know

How is compliance monitored?

Does your council set a limit on the number of cats per household?

- Yes
- No
- I don't know

Please describe

How is this monitored or enforced?

Does your council have any requirements for cats to be contained or confined?
E.g. a night curfew or cats required to be contained in certain areas

- Yes
- No
- I don't know

Please describe

For what reason is this required?

How is compliance monitored or enforced?

Does your council prohibit cats from any suburbs or areas?

- Yes
- No
- I don't know

Please describe

For what reason is this required?

How is compliance monitored or enforced?

How does your council respond to complaints about nuisance cats?

Does your council provide information to pet cat owners about responsible cat management?

- Yes
- No
- I don't know

Please describe

What is working well for the management of pet cats in your council area?

What are the main challenges for the management of pet cats in your council area?

What information or actions would help your council manage pet cats more effectively?

Do you consider there is a problem with stray or feral cats in your council area?

- Yes
- No
- I don't know

Please describe

Does your council carry out any management activities that aim to control stray or feral cats?

- Yes
- No
- I don't know

Please describe

Does your council monitor whether these actions are effective?

- Yes
- No
- I don't know

How are these activities monitored?

How much does your council spend annually on managing cats? (please provide estimate, including staffing and operational resources)

Please list any other individuals, businesses or organisations that might also have an interest in cat management in your council area

Appendix 3: Stakeholder survey

Confidential

Page 1

Keeping Cats Safe at Home - Stakeholder Survey

RSPCA NSW is currently consulting the community for a new project, Keeping Cats Safe at Home, which has been funded by a major grant from the NSW Government through its Environmental Trust. This project aims to reduce the impacts owned pet cats have on wildlife and will also encourage cat owners to keep their cats at home to keep them safe from injury and disease.

As an important stakeholder for this project we would greatly appreciate your input into defining the current cat-related challenges in your area and designing an intervention that will be most effective in your community.

If you would like any further information about this project please contact Dr Gemma Ma (0490 431 554, gma@rspcansw.org.au).

By completing this survey you are agreeing to us collecting personal information about you for the purposes of this project. Your information will be stored securely and your identity/information will be kept strictly confidential, except as required by law. You can read more about the RSPCA NSW privacy policy here: <https://www.rspcansw.org.au/privacy-policy/>

Please complete the survey below.

Thank you!

-
- 1) Local Government Area _____

 - 2) Name _____

 - 3) Organisation _____

 - 4) Phone number _____

 - 5) Email _____

 - 6) How are you (or your organisation) involved with the management of domestic cats?

 - 7) Do you (or your organisation) provide information or services to pet cat owners relating to cat management?

 - 8) What is working well for the management of cats in your Local Government Area?

 - 9) What are the main challenges for the management of cats in your Local Government Area?

10) What information or actions would help manage pet cats more effectively in your Local Government Area?

11) What do you think should be the aim of cat management in your area?

12) What do you think are the best ways to deal with conflicts that arise around cat management in your community?

13) Are there other people or organisations we should consult about cat management in your Local Government Area?

Appendix 4: Target Audience phone survey

Q1a. How many cats do own? _____

Q1b. (Repeat for each cat)

a. What is your cat's gender	<input type="radio"/> Female	<input type="radio"/> Male	<input type="radio"/> Don't know
b. Is it de-sexed?	<input type="radio"/> Yes	<input type="radio"/> No	<input type="radio"/> Don't know
c. Is it microchipped?	<input type="radio"/> Yes	<input type="radio"/> No	<input type="radio"/> Don't know
d. Is it registered with your local Council?	<input type="radio"/> Yes	<input type="radio"/> No	<input type="radio"/> Don't know
	<input type="radio"/> Not required for my Council		

Q2. Which of the following best describes your cats living arrangements?

- Inside all the time
- Outside all the time (free to roam)
- Inside during the night, but outside during the day (free to roam)
- Inside and outside, allowed to free roam when outside
- Inside and outside, but restricted from roaming freely (e.g. in cat escape-proof yard/ run, on a lead or fully supervised when outside)

Q3. What are the main factors you consider when deciding whether to allow your cat to roam freely or not? _____

Q4. On a typical day, for each of the following time periods, please indicate how often your cat is likely to be freely roaming outdoors (not in an enclosure)?

	Never	Some of the time	About half the time	Most of the time	Always
6am - Noon	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Noon - 6pm	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6pm - Midnight	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Midnight - 6am	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q5. To what extent you agree or disagree with each of the following statements.

<i>(rotate)</i>	Do not agree	Slightly agree	Somewhat agree	Agree	Strongly agree
a. Cats should be free to roam wherever they choose	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. Cats should be prevented from roaming freely to protect wildlife	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. Cats should be prevented from roaming freely to keep them safe	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d. Cats should be prevented from roaming freely as it is good for their health and wellbeing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
e. Cats should be prevented from roaming freely as they can be viewed as a nuisance or unwelcome visitors by neighbours	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
f. Cats do not like being prevented from roaming freely	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

<i>(Q5 continued)</i>	Do not agree	Slightly agree	Somewhat agree	Agree	Strongly agree
g. I am confident I can prevent my cat roaming freely at all times if I wish	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
h. I am confident that I can provide everything to ensure my cat is happy when it is not roaming freely	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
i. The law should be changed to require pet cats to be kept at their owner's property at all times	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
j. Preventing cat roaming freely is a practice that my family and friends would agree with	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
k. Preventing cats roaming freely is a practice that my neighbours would agree with	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
l. Preventing cats roaming freely is a practice that veterinarians would agree with	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
m. Cats should be prevented from roaming freely in the future if it is required by law	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
n. Preventing my cat roaming freely is difficult in my current residential circumstances	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q6a. How likely is it that you will do the following with your cat in the future?

	Very unlikely	Unlikely	Unsure	Likely	Very likely
Prevent my cat from roaming freely at all times	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Prevent my cat from roaming freely more often than I do currently	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Install modified fencing or a cat escape-proof enclosure	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q6b. What do you consider to be the most important issues or concerns relating to cats in your local area?

Q7a. In what kind of dwelling do you currently live?

- House with large / medium outside space
- House with small outside space (patio or small garden/courtyard)
- Semi-detached, terrace or townhouse with medium outside space (large garden)
- Semi-detached, terrace or townhouse with small outside space (patio or small garden/courtyard)
- Flat, unit, apartment with small outside space (balcony or patio)
- Flat, unit, apartment with no outside space
- Other _____

Q7b. Which of the following best describes your ownership of this dwelling?

- I or my family owns or is paying it off
- I or my family rent it
- Other _____

Q8a. What is your suburb / town? _____

And your postcode? _____

Q8b. How would you describe your locality?

- City
- Suburb / town
- Semi-rural
- Rural

Q8c. Your age at last birthday? _____

	Female	Male	Non-binary	Prefer not to say
Q8d. Gender?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Pet cat roaming behaviour will be investigated through another part of this project.

Q9a. Would you consider participating by hosting a remote sensing camera(s) at your property for two 28 day periods during the next four years? YES NO

Q9b. Would you consider participating by allowing your cat to wear a GPS logger harness for a 28 day period(s) during the next four years? YES NO

Q10a. Would you consider allowing us to contact you towards the end of the project (2024) to evaluate the programs offered by your Council? YES NO

Q10b. Would like to receive feedback about the overall results of this study YES NO

Q10c. Copy of the Participant's Information Statement? YES NO

If you answered **YES**, please indicate your preferred form of feedback and address:

Postal: _____

Email: _____

Appendix 5: Target Audience online survey

Q1. Do you own any cats? Y / N

Q2. How many cats do own? _____

Q3. Do you care for other free-roaming cats? Y / N

Q4. Which of the following best describes your cats living arrangements?

- Solely inside
- Solely free roaming (outside)
- Solely inside during the night, but free to roam during the day
- Inside and outside, allowed to free roam when outside
- Inside and outside, but restricted from roaming freely (e.g. in cat escape-proof yard/ run, on a lead or fully supervised when outside)

Q5. What are the main factors you consider when deciding whether to allow your cat to roam freely or not? _____

Q6. On a typical day, for each of the following time periods, please indicate how often your cat is likely to be freely roaming outdoors (not in an enclosure)?

	Never	Some of the time	About half the time	Most of the time	Always
6am - Noon	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Noon - 6pm	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6pm - Midnight	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Midnight - 6am	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q7. To what extent you agree or disagree with each of the following statements.

<i>(rotate)</i>	Do not agree	Slightly agree	Somewhat agree	Agree	Strongly agree
a. Cats should be free to roam wherever they choose	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. Cats should be prevented from roaming freely to protect wildlife	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. Cats should be prevented from roaming freely to keep them safe	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d. Cats should be prevented from roaming freely as it is good for their health and wellbeing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
e. Cats should be prevented from roaming freely as they can be viewed as a nuisance or unwelcome visitors by neighbours	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
f. Cats do not like being prevented from roaming freely	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
g. I am confident I can prevent my cat roaming freely at all times if I wish	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
h. I am confident that I can provide everything to ensure my cat is happy when it is not roaming freely	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
i. The law should be changed to require pet cats to be kept at their owner's property at all times	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
j. Preventing cat roaming freely is a practice that my family and friends would agree with	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
k. Preventing cats roaming freely is a practice that my neighbours would agree with	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
l. Preventing cats roaming freely is a practice that veterinarians would agree with	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

<i>(Q7 continued)</i>	Do not agree	Slightly agree	Somewhat agree	Agree	Strongly agree
m. Preventing cats roaming freely is a practice that other cat owners would agree with	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
n. Cats should be prevented from roaming freely in the future if it is required by law	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
o. Preventing my cat roaming freely is difficult in my current residential circumstances	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q8. How likely is it that you will do the following with your cat in the future?

	Very unlikely	Unlikely	Unsure	Likely	Very likely
Prevent my cat from roaming freely at all times	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Prevent my cat from roaming freely more often than I do currently	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Install modified fencing or a cat escape-proof enclosure	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q9. What do you consider to be the most important issues or concerns relating to cats in your local area?

Q10. In what kind of dwelling do you currently live?

- House with large / medium outside space
- House with small outside space (patio or small garden/courtyard)
- Semi-detached, terrace or townhouse with medium outside space (large garden)
- Semi-detached, terrace or townhouse with small outside space (patio or small garden/courtyard)
- Flat, unit, apartment with small outside space (balcony or patio)
- Flat, unit, apartment with no outside space
- Other _____

Q11. Which of the following best describes your ownership of this dwelling?

- I or my family owns or is paying it off
- I or my family rent it
- Other _____

Q12. What is your suburb / town? _____

And your postcode? _____

Q13. Your age at last birthday? _____

	Female	Male	Non-binary	Prefer not to say
Q14. Gender?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Pet cat roaming behaviour will be investigated through another part of this project.

Q15a. Would you consider participating by hosting a remote sensing camera(s) at your property for two 28 day periods during the next four years? YES NO

Q15b. Would you consider participating by allowing your cat to wear a GPS logger harness for a 28 day period(s) during the next four years? YES NO

Q16a. Would you consider allowing us to contact you towards the end of the project (2024) to evaluate the programs offered by your Council? YES NO

Q16b. Would like to receive feedback about the overall results of this study YES NO

If you answered **YES**, please indicate your preferred form of feedback and address:

Postal: _____

Email: _____