Natalie Blackstock, Dyanna Jolly and Jon Sullivan

Pussyfooting Around? Companion cat by-laws

in Aotearoa New Zealand

Abstract

Cats have a significant impact on Aotearoa New Zealand's biodiversity. While national legislation can help reduce the impacts of feral and stray cats, managing companion cats is more complex due to bonds between cats and their owners. Local councils can use by-laws to regulate companion cats, although it can be difficult to gain widespread public acceptance. This research analysed public submissions from five New Zealand councils to gain deeper insight into community attitudes towards cat control by-laws and consider the potential role of national standards. The submissions indicated that the majority of submitters supported by-laws, although regional differences suggest the need for localised approaches.

Keywords by-laws, cat legislation, cat management, cat predation, responsible cat ownership, cat welfare, conservation management, public consultation, public engagement, policy design

Natalie Blackstock completed her Master of Planning degree at Lincoln University in 2024 and is currently a graduate planner at Auckland Council. Dyanna Jolly is a senior lecturer in the Department of Environmental Management at Lincoln University. Jon Sullivan is a senior lecturer in the Department of Pest Management and Conservation at Lincoln University

ats are the most popular companion animal in New Zealand, with 41% of households owning at least one cat, and over 1.2 million companion cats nationally (CANZ, 2020). Additionally, there are approximately 200,000 stray cats and an estimated 2.4 million feral cats (Donnell, 2021). Cats of all relationship types (companion, stray and feral) threaten native biodiversity, cause public nuisance by damaging private gardens through defecating and spraying, and can transmit diseases and parasites such as Toxoplasma gondii to humans and wildlife (Bassett et al., 2020; Farnworth, Campbell and Adams, 2011; Glen et al., 2023; Kays et al., 2020; Loyd and Hernandez, 2012; National Cat Management Strategy Group, 2020; Read, 2019; Sumner, Walker and Dale, 2022).

While all cat types have significant ecological and health impacts (Bassett et al., 2020; Glen et al., 2023; Howe et al., 2014; Read, 2019; Roberts, Jones and Roe, 2021; Roe et al., 2017), due to the density of companion cats in urban areas, they collectively kill 28–52 times more animals

per square kilometre than feral cats¹ living in urban environments (Legge et al., 2020). The average home range of a companion cat is 3 hectares, although this range can increase for cats living near natural areas such as wetlands and reserves to a maximum of 6.8 hectares (Kikillus et al., 2017; Metsers et al., 2010; Thomas et al., 2014). The large home range size and ecological impacts of cats poses a problem for New Zealand as, thanks to conservation efforts, populations of threatened species such as kākā and kākāriki are increasing in cities like Wellington and Dunedin (Ballance, 2018; Concannon, 2021). Cat predation has a negative impact on these conservation successes. Cats also spread parasites, notably Toxoplasma gondii which sexually reproduces in cats and poses serious risks to humans, wildlife and livestock (Glen et al., 2023; Horn et al., 2011; Zhu, Van Wormer and Shapiro, 2023). Native species such as kiwi, kākā, kererū and red-crowned kākāriki have tested positive for toxoplasmosis, as have marine mammals, including New Zealand sea lions and Hector's and Māui dolphins (Glen et al., 2023; Howe et al., 2014; Roberts, Jones and Roe, 2021; Roe et al., 2017; Taylor et al., 2023). Some of the kiwi tested were living inside the Zealandia ecosanctuary in Wellington (Taylor et al., 2023), demonstrating that cat impacts can spread into these predator-free areas. In livestock, toxoplasmosis can cause reproductive issues, and is costly to monitor and control, impacting the agricultural industry (Glen et al., 2023; Roberts, Jones and Roe, 2021).

In New Zealand, feral, stray and companion cats are managed under various policies. Feral cat impacts are addressed through the Wildlife Act 1953, Conservation Act 1987 and Biosecurity Act 1993. The Animal Welfare Act 1999 protects feral and stray cats from wilful or reckless mistreatment, prohibits abandonment, and outlines the responsibilities of cat owners (Sumner, Walker and Dale, 2022). In addition to these national frameworks, regional and district councils play a key role in managing cats at the local level. Stray cats are typically managed through regional pest management plans in regions like Auckland, Northland and Wellington. These plans may include restrictions on feeding or relocating stray cats, and, in

some cases, classify them as pests (SPCA, n.d.a, n.d.b). Companion cat management is primarily regulated through local bylaws, with clauses varying by region (Sumner, Walker and Dale, 2022).

Community consultation is a key component of developing these by-laws. By analysing the consultation processes and submissions, this research offers insights into local government capability in participatory governance and decision making. These processes also illustrate how councils navigate competing priorities – ecological concerns, animal welfare and community values – when shaping cat management policies.

Currently, 23 of the 78 regional, territorial and unitary councils in New Zealand have by-laws with cat-specific clauses. Five councils have by-laws that include the full suite of currently accepted cat management legislation: limiting the number of cats per household and requiring mandatory microchipping,

desexing and registration. Eleven councils solely limit the number of cats per household, while five councils have for requirements mandatory microchipping, desexing and registration but no limits on the number of cats. One council's by-law only includes limits on the number of cats per household and mandatory desexing, and one includes only mandatory microchipping and registration (Kilkillus et al., 2017, Sumner, Walker and Dale, 2022; SPCA, n.d.a; SPCA, n.d.b; Selwyn District Council, n.d.). Public acceptance significantly influences which clauses are adopted: for example, Selwyn District Council removed desexing requirements after public feedback (Sandys, 2021).

Beyond reducing nuisance and supporting conservation, cat control bylaws provide animal welfare benefits for cats and their owners, while contributing to national cat management (Sumner, Walker and Dale, 2022). Desexing lowers

Table 1: Territorial authorities and the cat management measures included in their by-laws

Territorial authority	Desexing	Microchipping	Registration	Limits on number of cats per household
Buller District Council	V	V	V	V
Far North District Council*				✓
Hastings District Council				V
Hutt City Council	V	✓	V	
Invercargill City Council				V
Kaipara District Council				✓
Manawatu District Council	V			✓
Marlborough District Council				✓
Nelson City Council	V	V	V	
New Plymouth District Council				✓
Palmerston North City Council	V	V	V	✓
Rangitikei District Council				✓
Ruapehu District Council	V	V	V	✓
Selwyn District Council		~	✓	
South Waikato District Council				✓
Tararua District Council	V	~	✓	✓
Tasman District Council	V	V	V	
Wairarapa consolidated by- law**				V
Wellington City Council	V	V	V	
Whanganui District Council	~	✓	V	✓
Whangarei District Council	V	V	V	

^{*} Far North District Council is undertaking a by-law review which proposes adding mandatory desexing, registration and microchipping of cats.

^{**} Adopted by the Carterton, Masterton and South Wairarapa district councils in 2019.

the risk of reproductive diseases, increases cat lifespan, curbs unwanted behaviours like urine marking, and reduces risks associated with roaming (ibid.; Kent et al., 2022). Nationally, higher desexing rates help prevent cat abandonment and relinquishment to shelters (SPCA, n.d.a; Sumner, Walker and Dale, 2022). Microchipping and registration improve the likelihood of reuniting lost cats with their owners: for example, following the 2011 Christchurch earthquake, 85% of microchipped cats were returned home within three hours, compared to just 25% of non-microchipped cats within seven days (SPCA, n.d.a).

Despite growing recognition of the ecological, health and nuisance impacts of cats, cat management remains locally controlled through council by-laws, resulting in inconsistencies across the country. This variation in regulations has led to calls for a more unified approach to cat management at the national level. In July 2023, Parliament's Environment Committee recommended developing a nationwide cat management framework requiring registration, desexing and microchipping, with exemptions as needed. Groups such as the SPCA, Predator Free New Zealand and the National Cat Management Strategy Group consider national cat legislation to be the best option to resolve discrepancies between each council's cat by-law requirements (SPCA, n.d.a, n.d.b; National Cat Management Strategy Group, 2020). Research suggests that a national strategy could balance the benefits of cat ownership with societal and environmental impacts (Walker, Bruce and Dale, 2017; Somerfield, 2019). However, in November 2024 the government shelved the proposed National Cat Act, indicating that nationwide cat management was not a priority. For groups such as the SPCA and Predator Free New Zealand, the government's inaction was a 'colossal missed opportunity' (Sharpe, 2024). Are councils to be left to tackle this issue alone, or is it time for the government to stop pussyfooting around and take action on cat management?

Research methodology

We collected submissions data from five councils: Palmerston North City Council, Selwyn District Council, Tasman District Despite growing recognition of the ecological, health and nuisance impacts of cats, cat management remains locally controlled through council by-laws, resulting in inconsistencies across the country.

Council, Wellington City Council and Whangarei District Council. The five councils were chosen based on similarities in the cat management clauses in their bylaws, and their representation of different demographic and regional areas, such as urban, rural or an urban/rural mix. Because each council collected this data differently, a mixed-method approach combining qualitative and quantitative analysis was used to determine the common themes and significant regional similarities and differences among the submissions. Statistical analyses were conducted using R statistical software (v4.4.1). A binomial generalised linear model (Hothorn, Bretz and Westfall, 2008) was used to analyse the data, with a Holm's sequential Bonferroni procedure applied to account for conducting multiple tests on the same dataset. Most submissions were from the councils' original by-laws, except for Wellington City Council's, which were from the 2024 by-law amendment on mandatory desexing. A total of 2,725 submissions were analysed, with cat-specific submissions distributed as follows: Palmerston North City Council received 46, Selwyn District Council 289, Tasman District Council 408, Wellington City Council 580 and Whangarei District Council 1,402.

Results

Ten themes emerged from the analysis, highlighting the various issues around cat management and public views on by-law requirements. Some themes were more frequently commented on than others. Themes commented on in 20% or more of submissions in most regions were:

- nuisance;
- cost concerns;
- stray and feral cat management;
- · containment/curfews;
- conservation/environmental concerns;
- · by-law support.

Fewer than 10% of submissions in most regions commented on:

- human and livestock health concerns;
- toxoplasmosis risk to wildlife;
- benefits of cats;
- anti-regulation sentiments.

This article focuses on five of these themes, due to their implications for policy and management: by-law support, anti-regulation sentiments, nuisance, conservation and cost.

Theme 1: By-law support

All councils except Palmerston North surveyed residents on whether they would support the by-law or its clauses. While there was statistically significant regional variation in the by-law support theme, all regions showed majority support for cat by-laws. For this theme, free-text submissions were examined for support-related terms and combined with survey form data ('Comment' vs 'Box tick' in Figure 1). Wellington had the highest support at 96% of submissions, while Palmerston North had the lowest at 59%. However, the Palmerston North percentage may have been higher if submitters were directly asked if they supported the by-law, as shown by the increase in support for regions where survey form data was available. Palmerston North also had fewer submissions than other councils, with 46 cat-specific submissions, compared to Whangarei as the highest with 1,402 submissions. Statistically, Selwyn and Palmerston North had similar levels of support for by-laws, as did Tasman and Whangarei, indicated by the letters at the top of Figure 1.

Theme 2: Anti-regulation sentiments

Anti-regulation sentiments were analysed to determine why some submitters were

opposed to the by-laws. Frequently expressed comments were that the by-law was a 'revenue' or 'money making' exercise, 'anti-cat', a 'waste of time and/or money' and 'unenforceable'. Some submitters also felt that it should be their decision whether to desex, microchip or register their cat. There was significant regional variation among submissions on this theme, with Palmerston North, Tasman and Selwyn submitters expressing the highest percentage of anti-regulation sentiments, between 11% and 20%, while Wellington and Whangārei had the lowest at 1%.

Theme 3: Nuisance

Nuisance-related issues were a high cause for concern in most regions, with examples of cats digging or fouling gardens, fighting and demonstrating 'anti-social cat behaviours'. Whangārei had the highest number of submissions tagged with this theme, at 79%, as this was the focus of a petition submitted by 1,092 residents, focusing on the nuisance and health impacts of stray and feral cats in the region. Other regions had moderately high percentages of nuisancerelated submissions, with Selwyn at 38%, Palmerston North at 26% and Tasman at 18%, while Wellington had the lowest percentage at 5%.

Theme 4: Conservation/environmental concerns

All regions expressed concerns about the environmental and conservation impacts of cats, with submitters often mentioning various native species and areas of conservation in their region. Whangārei and Tasman had the highest percentage of submissions with this theme at 40% and 36% respectively, followed by Selwyn (27%), Palmerston North (26%) and Wellington (23%). These submitters were all concerned about cats' impacts on native species within their region and nationally.

Theme 5: Cost concerns

Cost concerns generally related to the affordability of cat by-law clauses and recommendations for councils to provide subsidies or discounts when implementing the by-law. Whangārei had the highest percentage of cost concerns, at 81%, followed by Palmerston North (50%), Tasman (24%),

Selwyn (19%) and Wellington (7%). While no council collected demographic data, some financial demographics can be inferred from the Statistics New Zealand 2018 census, which shows that Whangārei, Tasman and Palmerston North have the lowest median incomes and percentages of full-time employment of the regions studied (Statistics New Zealand, n.d.a, n.d.b, n.d.c). The census information may correlate with the varying levels of concern found across the regions, as regions with lower reported incomes had higher levels of concern about cost. However, cost concerns did not explicitly relate to the submitter's income, with many submitters expressing concern for low-income households in their region, and a desire for subsidies to support these residents.

Councils and cat by-laws

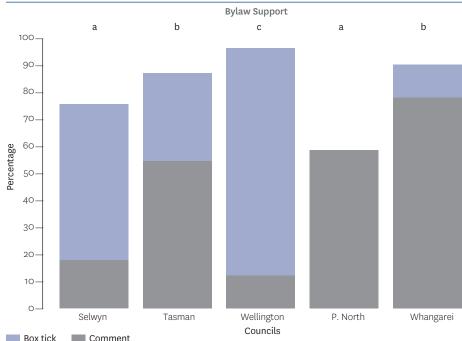
Wellington City Council was the first council to implement a cat by-law, with the Animal Bylaw 2016 requiring mandatory microchipping and registration (Kikillus et al., 2017). In 2024, the by-law was updated to include desexing. Eighty-nine per cent of submitters supported the 2016 by-law (Simmons, 2016), with submitter support increasing to 96% for the 2024 update. Palmerston North City Council implemented their by-law in 2018, and as

such the lower support percentage may reflect the novelty of cat management bylaws at that time. The number of councils introducing cat by-laws rose substantially from 2020 onwards (Sumner, Walker et al., 2022). The Selwyn District Council by-law was introduced in 2021, Whangarei District Council's in 2022, and Tasman District Council's came into effect in late 2024, accompanied by an equivalent by-law from Nelson City Council. The growing number of cat by-laws nationwide may be contributing to public support for these measures. Awareness of cat management issues is not a new topic, with Gareth Morgan's 'Cats to Go' campaign in 2013 generating a strong emotional response in New Zealand and overseas (Adam, 2013). Despite the controversy, public perceptions of cats have shifted more towards Morgan's ideas, with New Zealand residents showing strong support for a national cat management strategy and exclusion zones to protect wildlife from cats (Read, 2019; Walker, Bruce and Dale, 2017).

Implications for local and regional planning

Key themes in public submissions reflect region-specific issues that decision makers must address. For example, nuisance caused by cats, particularly their impacts

Figure 1: Percentage of submitters who support by-laws by council



'Box tick' refers to data gathered through survey forms, while 'Comment' refers to searching free-text submissions for tagged words. The letters along the top denote whether regional variations were statistically significantly different (Pc.O.S) using a Tukey'S HSD test. Palmerston

North and Selwyn are statistically similar (a). Tasman and Whangārei are also statistically similar (b) but different from Wellington, Palmerston North and Selwyn. Wellington statistically differed from the other councils (c).

on gardens, emerged as a common concern, though Selwyn residents commented more on this issue than Wellington residents. This disparity likely reflects housing type and density differences between the two regions, as fewer Wellington residents would have access to garden space to grow vegetables. Additionally, rural Selwyn residents may be more aware of the risks of toxoplasmosis than Wellington residents, due to its agricultural impacts (Glen et al., 2023; Roberts, Jones and Roe, 2021). In Whangārei, nuisance issues primarily stemmed from stray cats, reflecting a need for greater control of stray cat populations.

Cost concerns also varied by region, with lower-income areas more likely to comment on the cost of cat management measures and the need for subsidies. This concern is likely amplified by the ongoing cost-of-living crisis and its impact on those with a lower socioeconomic status. Submitters in all regions expressed concern about how the by-law would affect low-income households and a desire for the council to support these households.

Conservation and environmental concerns were frequently raised, with submitters commenting on local conservation issues. These included impacts on particular species in their region, such as kororā/little penguins (Eudyptula minor) in Tasman and Wellington, and long-tailed bats (Chalinolobus tuberculatus) in Whangārei, and impacts on particular places of conservation significance, such as Zealandia in Wellington and St Arnaud in Tasman. Submitters were more likely to support stricter measures such as containment, curfews and exclusion zones around these areas or in the habitats of these taonga species. Several submitters in each region thought that 'much stronger action' was needed, referring to New Zealand's dog control policies and Australia's cat containment regulations as examples of how cat roaming could be restricted to better protect wildlife and reduce nuisance effects.

Anti-regulation sentiments are another theme important to designing and implementing policy and by-laws. Public concerns around enforcement of by-law measures, microchip failure, and by-laws as a 'money-grabbing exercise' reflect the ... the variation in regional concerns highlights the need for tailored approaches that consider both the specific issues faced by each community and the broader implications for conservation and animal welfare.

importance of consultation, information provision and transparency. However, this may be easier said than done, as those expressing anti-regulation sentiments do not appear to seek this information. This is particularly evident in responses to social media posts by councils during by-law consultations. For example, Tasman District Council social media posts encouraging public submissions on their proposed cat by-law elicited comments opposing microchipping and registration, based on the misconception that council would charge an annual fee similar to dog registration. Despite multiple replies from a council staff member clarifying that the fee is a one-time charge to the New Zealand Companion Animal Register, the volume of comments on the matter indicated that many individuals had not fully read the post or prior responses addressing the same concern (Tasman District Council, 2023). To resolve such misunderstandings, a more nuanced approach may be needed, with ongoing engagement and education. Concerns around freedom of choice and by-laws being 'anti-cat' could be addressed by educating the public on how by-laws benefit cats and owners themselves.

Research shows that cat owners are more likely to support regulations that address animal welfare than ones that address other issues such as conservation (Hall et al., 2016; Kent et al., 2022; Sumner, Walker and Dale, 2022).

Submission rates across regions varied, which could reflect differences in public engagement, regional concerns, or the accessibility of the submission process. For instance, Wellington, with a population of 202,737, received 580 submissions, corresponding to about 0.29% of its population. In contrast, Whangarei, with a population of 90,960, received 1,402 submissions, or about 1.54% of the population. Tasman (0.78%), Selwyn (0.48%) and Palmerston North (0.05%) also showed varied submission rates, with Palmerston North having the lowest engagement relative to its population. These findings highlight an ongoing challenge in public engagement. As Hodder (2019) notes, only a small percentage of a region's population typically engages in the submission process. Consequently, enhancing community engagement and collaboration is essential to effectively identify the issues that need to be addressed in cat management (Reid and Schulze, 2019).

Effective regulation is critical to mitigating the impacts of cats on New Zealand's biodiversity. However, the variation in regional concerns highlights the need for tailored approaches that consider both the specific issues faced by each community and the broader implications for conservation and animal welfare. By incorporating public feedback on cat-control issues, councils can develop more effective and widely accepted solutions for managing cat populations while minimising negative impacts on both wildlife and residents. It is important that decision makers consider region-specific issues and address these when developing and implementing by-laws.

Locally, planners can engage, educate and legislate in response to region-specific matters to better address residents' concerns. The Whangārei petition highlighted the importance of stray cat management in the area, while submissions to Selwyn, Tasman, Palmerston North and Wellington councils showed a desire for

containment/curfews and/or cat exclusion zones around ecologically significant areas. Further, transition periods between adoption of the by-law and its enforcement are essential, as they give cat owners time to comply with by-laws, and councils to address some of the cost concerns expressed in submissions.

Standardising survey design

Four of the five councils used online surveys as part of their engagement process. Some offered multiple-choice questions and some provided a combination of both. However, each council used a different survey format and asked different questions, leading to notable variations in how respondents engaged with the process. Complex multiple-choice options often caused confusion, while surveys that used clear, simple language and concise answer choices were generally better received, with fewer instances of misunderstanding.

Despite these differences, the core purpose of each survey was the same: to gauge public support for the by-law, identify which management measures were preferred, and understand the reasons behind that support or opposition. A standardised survey format across councils would not only reduce confusion, but also ensure consistency in how questions are framed, making it easier to compare public sentiment between regions. This approach would enable councils to identify trends more effectively, share insights, and engage with their communities in a more targeted and meaningful way. Standardising the format would ultimately create a more streamlined, transparent public consultation process while minimising the risk of misinterpretation. After all, if we're all asking the same questions, shouldn't we be asking them in the same way?

Localised versus nationwide approaches towards cat management

Cats have significant national impacts on native wildlife, and on human and livestock health and wellbeing through predation, parasite spread, particularly *Toxoplasma gondii*, and nuisance effects. Despite these negative impacts, cat ownership can offer various benefits, including improved mental and physical health, reduced stress and enhanced well-being through tactile

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interactions and caregiving (Barker et al., 2005; Ravenscroft et al., 2021). However, the evidence supporting these benefits is mixed, with some studies indicating limited or no significant improvements (Ogata, Weng and Messam, 2023; Ravenscroft et al., 2021; Schreiner, 2016). Nevertheless, many pet owners perceive their cats as important companions and family members, contributing positively to their lives (Hardie, Mai and Howell, 2023; Ravenscroft et al., 2021). As such, the complex relationship between people and their pets is an important aspect for decision makers to consider when creating cat management legislation.

Public awareness of cats' environmental impacts has grown, with increasing media coverage of this topic (Brettkelly, 2022; Dowling, 2023; Page, 2023; RNZ, 2024), which has led some people to reconsider cat ownership (McClure, 2023). New Zealand has previously taken action against the impact of pets, such as banning ferret sales

in 2002 (Lee, 2002), although a similar ban on cats is unlikely due to their widespread popularity, emphasising the need for effective management legislation.

In New Zealand, 41% of households own a cat, and of these, 74% consider their cat a member of the family (CANZ, 2020), meaning cat management is often a deeply personal issue. Many cat owners are already complying with management measures, with 88% of all companion cats desexed and 49% microchipped (ibid). Additionally, New Zealand research shows that there is high support for desexing, microchipping and registration among cat owners (Bassett et al., 2020; CANZ, 2020; Forrest et al., 2019; Gates et al., 2019; Hall et al., 2016; Ovenden, Bassett and Sumner, 2024; Sumner, Walker and Dale, 2022; Walker, Bruce and Dale, 2017). Given the strong support for by-laws demonstrated in this research, and consistent with recommendations from the National Cat Management Strategy Group (2020), the SPCA (n.d.a, n.d.b) and other research (Sumner, Walker and Dale, 2022; Walker et al., 2017), national cat management legislation requiring mandatory desexing, microchipping and registration seems likely to be well-received by most of the New Zealand public.

The National Cat Act proposed by the National Cat Management Strategy Group was supported by many national organisations, including wildlife conservation groups such as Forest and Bird and Predator Free New Zealand (Forest and Bird, 2023; Rutledge, 2022; Predator Free New Zealand, n.d.), as well as animal welfare organisations like the SPCA. Additionally, international commitments that New Zealand has signed, such as the Ramsar Convention and the Convention on Biological Diversity, technically require the control of feral and domestic cats (Trouwborst, McCormack and Martínez Camacho, 2020). These commitments, coupled with the increasing public awareness of cat impacts and the strong support for cat management measures seen in the findings and literature, demonstrate that for legal and social reasons, New Zealand should implement national cat legislation to reduce the environmental, nuisance and health impacts of cats.

Despite the necessity of cat legislation, challenges remain, particularly regarding costs and resistance to regulation. Cost is a significant barrier and may require local or central government support and subsidies to address. Decision makers could partner with national groups like the SPCA, or local groups like Cats Protection, who already offer subsidised desexing and microchipping services (Cats Protection League Canterbury, n.d.; Cats Protection Wellington, n.d.; SPCA, 2024). Antiregulation sentiments will remain a barrier, although these can be addressed in part through good engagement on a local level. Ongoing education, engagement and advocacy on the importance of these measures for cats, the environment and the wider public, alongside a slow, phased-in approach to regulation (National Cat Management Strategy Group, 2020), would be essential to ensure the success of national legislation. Cat owners are usually more receptive to education that focuses on animal welfare and responsible cat ownership than conservation (Crowley, Cecchetti and McDonald, 2019; Dickman, 2009; Hall et al., 2016; Ovenden, Bassett and Sumner, 2024; Sumner, Walker and Dale, 2022; Woolley and Hartley, 2019); however, wildlife conservation is a key concern to both cat owners and nonowners, with cat owners in New Zealand showing greater concern about the

conservation impacts of cats than those in other countries (Foreman-Worsley et al., 2021; Hall et al., 2016). Thus, any education campaign should use a dual approach, focusing on the conservation impacts and animal welfare benefits of cat legislation. These challenges are not insurmountable, and the widespread support for better cat management shows that New Zealand is ready to do better.

Conclusion

Despite the proposed National Cat Act not being prioritised by the current government (Environment Committee, 2023; Sharpe, 2024), this research suggests that New Zealanders support better cat management, and many cat owners are already complying with the proposed management measures (desexing, microchipping and registration). The strong support for these measures indicates that national legislation is not only feasible but would likely be well received by much of the New Zealand public. However, regional differences indicate that to effectively implement national legislation, local authorities would need to work closely with communities, especially in low-income areas where residents may require support from councils and local organisations to comply with legislation. Additionally, a nationwide legislative framework could give local councils the flexibility to address

region-specific concerns, and potentially implement stricter measures like exclusion zones or containment around ecologically significant areas where desired.

This study highlights how consultation processes can serve as a mechanism for public sector leadership, shaping both policy design and community trust. It also reveals the potential – and the limitations - of public consultation as a governance tool, particularly when navigating complex issues. These limitations could be reduced by standardising public engagement tools, such as survey design, to improve clarity, minimise misinterpretation, and enable more meaningful cross-regional comparisons. Ultimately, the success of any cat management legislation depends on a careful balance between national standards and local adaptation, ensuring that the preservation of wildlife, the welfare of cats and the concerns of the public are all addressed in a clear and effective manner. It is time to stop pussyfooting around and establish a national plan for cats – one that promotes better cat welfare while protecting New Zealand's unique indigenous biodiversity.

References

- Adam, K. (2013) 'Cat wars break out in New Zealand', *Guardian*, 21 May, https://www.theguardian.com/world/2013/may/21/cat-wars-new-zealand-morgan
- Ballance, A. (2018) 'Native birds doing well in Wellington', RNZ, 5 July, https://www.rnz.co.nz/national/programmes/ourchangingworld/audio/2018651967/native-birds-doing-well-in-wellington
- Barker, S.B., J.S. Knisely, N.L. McCain and A.M. Bes (2005) 'Measuring stress and immune response in healthcare professionals following interaction with a therapy dog: a pilot study', *Psychological Reports*, 96 (3), pp.713–29, https://doi.org/10.2466/PRO.96.3.713-729
- Bassett, I.E., E.J. McNaughton, G.D. Plank and M.C. Stanley (2020) 'Cat ownership and proximity to significant ecological areas influence attitudes towards cat impacts and management practices', Environmental Management, 66 (1), pp.30–41, https://doi.org/10.1007/s00267-020-01289-2
- Brettkelly, S. (2022) 'The Detail: Are cats mostly pets or mainly predators?', Stuff, 11 February, https://www.stuff.co.nz/national/thedetail/300515164/the-detail-are-cats-mostly-pets-or-mainly-predators
- Cats Protection League Canterbury (n.d.) 'Services for cat owners', https://www.cats.org.nz/services-for-cat-owners/

- Cats Protection Wellington (n.d.) 'Discounted desexing of cats', https://www.catsprotectionwellington.org.nz/desex-your-cat/
- CANZ (2020) Companion Animals in New Zealand 2020, Wellington:
 Companion Animals New Zealand, https://www.companionanimals.
 nz/2020-report
- Concannon, C. (2021) 'The kaka's return', RNZ, 16 September, https://www.rnz.co.nz/national/programmes/ourchangingworld/audio/2018812266/the-kaka-s-return
- Crowley, S.L., M. Cecchetti and R.A. McDonald (2019) 'Hunting behaviour in domestic cats: an exploratory study of risk and responsibility among cat owners', *People and Nature*, 1 (1), pp.18–30, https://doi.org/10.1002/pan3.6
- Dickman, C.R. (2009) 'House cats as predators in the Australian environment: impacts and management', *Human–Wildlife Conflicts*, 3 (1), pp.41–8, https://doi.org/10.26077/55nn-p702
- Donnell, H. (2021) 'Our love affair with cats', *New Zealand Geographic*, 167, https://www.nzgeo.com/stories/our-love-affair-with-cats/
- Dowling, S. (2023) 'Should New Zealand cats be kept indoors?', BBC, 21 February, https://www.bbc.com/future/article/20230217-should-new-zealand-cats-be-kept-indoors

¹ The definitions of stray and feral cats vary by country. In New Zealand, feral cats are defined as living independently from humans, with no input from the companion cat population, while stray cats are considered semi-reliant on human resources and increase their population through interbreeding with companion cats. In an Australian article (Legge, 2020), stray cats are defined as a subset of feral cats (semi-feral), so in this instance, 'feral cats' refers to stray and feral cats.

- Environment Committee (2023) 'Report of the Environment Committee:

 Petition of Erica Rowlands: Mandate the registration and desexing of
 pet cats and kittens', https://urbanark.nz/site/assets/files/1194/
 final_report_petition_of_erica_rowlands.pdf
- Farnworth, M.J., J. Campbell and N.J. Adams (2011) 'What's in a name?

 Perceptions of stray and feral cat welfare and control in Aotearoa,

 New Zealand', *Journal of Applied Animal Welfare Science*, 14 (1),

 pp.59–74, https://doi.org/10.1080/10888705.2011.527604
- Foreman-Worsley, R., L.R. Finka, S.J. Ward and M.J. Farnworth (2021) 'Indoors or outdoors? An international exploration of owner demographics and decision making associated with lifestyle of pet cats', *Animals*, 11 (2), pp.1–25, https://doi.org/10.3390/ani11020253
- Forest and Bird (2023) 'Time to act for cats', 15 December, https://www.forestandbird.org.nz/resources/time-act-cats
- Forrest, R., M. Pearson, S. Thomson, H. Bakri, E. Steiner and N. Waran (2019) Furry Whānau Wellbeing: working with local communities for positive pet welfare outcomes, New Zealand Companion Animal Trust research study, final report, https://static1.squarespace.com/static/5d1bf13a3f8e880001289eeb/t/6091aaab02fb757a49b1a7c8/1620159157972/NZCAT+Furry+Whanau+Final+report.pdf
- Gates, M.C., J. Walker, S. Zito and A. Dale (2019) 'A survey of opinions towards dog and cat management policy issues in New Zealand, New Zealand Veterinary Journal, 67 (6), pp.315–22, https://doi.org/10.108 0/00480169.2019.1645627
- Glen, A.S., S. Edwards, S. Finlay-Smits, C. Jones, C.N. Niebuhr, G.L. Norbury and A. Samaniego (2023) 'Management of cats in Aotearoa New Zealand: a review of current knowledge and research needs', New Zealand Journal of Ecology, 47 (1), 3550, https://doi.org/10.20417/nzjecol.47.3550
- Hall, C.M., N.A. Adams, J.S. Bradley, K.A. Bryant, A.A. Davis, C.R.
 Dickman, T. Fujita, S. Kobayashi, C.A. Lepczyk, E.A. McBride, K.H.
 Pollock, I.M. Styles, Y. van Heezik, F. Wang and M.C. Calver (2016)
 'Community attitudes and practices of urban residents regarding predation by pet cats on wildlife: an international comparison', *PLOS One*, 11 (4), e0151962, https://doi.org/10.1371/journal.pone.0151962
- Hardie, S., D.L. Mai and T.J. Howell (2023) 'Social support and wellbeing in cat and dog owners, and the moderating influence of pet-owner relationship quality', *Anthrozoös*, 36 (5), pp.891–907, https://doi.org/10.1080/08927936.2023.2182029
- Hodder, P. (2019) 'Measuring the effectiveness of New Zealand's local government', *Policy Quarterly*, 15 (3), pp.75–83
- Horn, J.A., N. Mateus-Pinilla, R.E. Warner and E.J. Heske (2011) 'Home range, habitat use, and activity patterns of free-roaming domestic cats', *Journal of Wildlife Management*, 75 (5), pp.1177–85, https://doi.org/10.1002/jwmg.l45
- Hothorn, T., F. Bretz and P. Westfall (2008) 'Simultaneous inference in general parametric models', *Biometrical Journal*, (3), pp.346–63, https://doi.org/10.1002/bimj.200810425
- Howe, L., S. Hunter, E. Burrows and W. Roe (2014) 'Four cases of fatal toxoplasmosis in three species of endemic New Zealand birds', Avian Diseases, 58 (1), pp.171–5, https://doi.org/10.1637/10625-080413-Case.1
- Kays, R., R.R. Dunn, A.W. Parsons, B. Mcdonald, T. Perkins, S.A. Powers, L. Shell, J.L. McDonald, H. Cole, H. Kikillus, L. Woods, H. Tindle and P. Roetman (2020) 'The small home ranges and large local ecological impacts of pet cats', *Animal Conservation*, 23 (5), pp.516–23, https://doi.org/10.1111/acv.12563

- Kent, M.S., S. Karchemskiy, W.T.N. Culp, A.T. Lejeune, P.A. Pesavento, C. Toedebusch, R. Brady and R. Rebhun (2022) 'Longevity and mortality in cats: a single institution necropsy study of 3108 cases (1989–2019)', PLOS One, 17 (12), e0278199, https://doi.org/10.1371/journal.pone.0278199
- Kikillus, K.H., G.K. Chambers, M.J. Farnworth and K.M. Hare (2017) 'Research challenges and conservation implications for urban cat management in New Zealand', *Pacific Conservation Biology*, 23 (1), pp.15–24, https://doi.org/10.1071/PC16022
- Lee, S. (2002) 'Pet ferrets to be banned', media release, 28 March, https://www.beehive.govt.nz/release/pet-ferrets-be-banned
- Legge, S., J.C.Z. Woinarski, C.R. Dickman, B.P. Murphy, L.A. Woolley and M.C. Calver (2020) 'We need to worry about Bella and Charlie: the impacts of pet cats on Australian wildlife', *Wildlife Research*, 47 (8), pp.523–39, https://doi.org/10.1071/WR19174
- Loyd, K.A.T. and S.M. Hernandez (2012) 'Public perceptions of domestic cats and preferences for feral cat management in the southeastern United States', *Anthrozoös*, 25 (3), pp.337–51, https://doi.org/10.2752 /175303712X13403555186299
- McClure, T. (2023) "Bird killing machines": New Zealand cools on cats to protect native wildlife', *Guardian*, 18 August, https://www.theguardian.com/world/2023/aug/19/bird-killing-machines-new-zealand-cools-on-cats-to-protect-native-wildlife
- McLeod, L.J., D.W. Hine and A.J. Bengsen (2015) 'Born to roam?

 Surveying cat owners in Tasmania, Australia, to identify the drivers and barriers to cat containment', *Preventive Veterinary Medicine*, 122 (3), pp.339–44, https://doi.org/10.1016/j.prevetmed.2015.11.007
- Metsers, E.M., P.J. Seddon and Y.M. van Heezik (2010) 'Cat-exclusion zones in rural and urban-fringe landscapes: how large would they have to be?', *Wildlife Research*, 37 (1), pp.47–56, https://doi.org/10.1071/WR09070
- National Cat Management Strategy Group (2020) New Zealand National Cat Management Strategy Group Report 2020, https://static1.
 squarespace.com/static/5d1bf13a3f8e880001289eeb/t/
 5f6d986d7bea696c449fa5a7/1601017986875/NCMSG_Report_
 August+2020.pdf
- Ogata, N., H.Y. Weng and L.L.M. Messam (2023) 'Temporal patterns of owner-pet relationship, stress, and loneliness during the COVID-19 pandemic, and the effect of pet ownership on mental health: a longitudinal survey', *PLOS One*, 18 (4), e0284101, https://doi.org/10.1371/JOURNAL.PONE.0284101
- Ovenden, K., I. Bassett and C.L. Sumner (2024) "I want you to want me": how owners value cats' choices has implications for cat containment', *People and Nature*, 6 (2), pp.548–61, https://doi.org/10.1002/pan3.10580
- Page, T. (2023) 'Culling cats: "destructive pests" or "really important pets"?', 1News, https://www.1news.co.nz/2023/05/28/culling-cats-destructive-pests-or-really-important-pets/
- Palmerston North City Council (n.d.) 'Animals and Bees Bylaw', https://www.pncc.govt.nz/Council/Official-documents/Bylaws/Animals-and-Bees-Bylaw
- Predator Free New Zealand (n.d.) 'It's time for a National Cat Act', https://predatorfreenz.org/cats/
- Ravenscroft, S.J., A.M. Barcelos, D.M. Mills and J. Banks (2021) 'Cathuman related activities associated with human well-being', Human-Animal Interaction Bulletin, 11 (2), pp.79–95, https://doi.org/10.1079/HAI.2021.0006

- Read, J.L. (2019) Among the Pigeons: why our cats belong indoors, Adelaide: Wakefield Press
- Reid, A. and H. Schulze (2019) 'Engaged communities: how communityled development can increase civic participation', BERL for the Helen Clark Foundation, https://taituara.org.nz/ Story?Action=ViewandStory_id=192
- RNZ (2024) 'Debate heating up on management of domestic and feral cats', Nine to Noon, 11 April, https://www.rnz.co.nz/national/programmes/ninetonoon/audio/2018933812/debate-heating-up-on-management-of-domestic-and-feral-cats
- Roberts, J.O., H.F.E. Jones and W.D. Roe (2021) 'The effects of Toxoplasma gondii on New Zealand wildlife: implications for conservation and management', Pacific Conservation Biology, 27 (3), pp.208–20, https://doi.org/10.1071/PC20051
- Roe, W.D., S. Michael, J. Fyfe, E. Burrows, S.A. Hunter and L. Howe (2017) 'First report of systemic toxoplasmosis in a New Zealand sea lion (Phocarctos hookeri)', New Zealand Veterinary Journal, 65 (1), pp.46–50, https://doi.org/10.1080/00480169.2016.1230526
- Rutledge, M. (2022) 'Request to mandate the registration and desexing of pet cats and kittens Department of Conservation', https://www.parliament.nz/en/pb/sc/submissions-and-advice/document/53SCPET_EVI_102570_PET2514/department-of-conservation
- Sandys, S. (2021) 'New bylaw requires cats to be microchipped', *Star News*, 24 May, https://www.odt.co.nz/star-news/star-districts/star-selwyn/new-bylaw-requires-cats-be-microchipped
- Schreiner, P.J. (2016) 'Emerging cardiovascular risk research: impact of pets on cardiovascular risk prevention', *Current Cardiovascular Risk Reports*, 10 (2), https://doi.org/10.1007/S12170-016-0489-2
- Selwyn District Council (n.d.) 'Microchipping and registering your cat', https://www.selwyn.govt.nz/services/dogs-And-animals/cats
- Sharpe, M. (2024) 'Government inaction "a colossal missed opportunity" in face of a 'crisis of cats', *Stuff*, 4 November, https://www.stuff.co.nz/nz-news/360471763/government-inaction-colossal-missed-opportunity-face-crisis-cats
- Simmons, G. (2016) 'Wellington City Council cat bylaw a win for the environment', blogpost, Morgan Foundation, 3 August, https://morganfoundation.org.nz/the-council-and-the-cats/
- Somerfield, E. (2019) 'The state of cats in New Zealand: a precarious position', *Lincoln Planning Review*, 10 (1–2), pp.25–32, https://livingheritage.lincoln.ac.nz/pdf/web/viewer.html?file=/assets/displaypdf/82221#page=28
- SPCA New Zealand (n.d.a) 'National cat legislation for New Zealand: background document', NZSPCA policy brief, https://www.spca.nz/images/assets/772883/1/national%20cat%20legislation_bd_v2_final.pdf
- SPCA New Zealand (n.d.b) 'National cat legislation for New Zealand', policy brief, https://www.spca.nz/Images/Assets/746268/1/
 National%20Cat%20Legislation%20-%20Policy%20Brief.pdf
- SPCA New Zealand (2024) 'Snip 'n' chip continues to make an impact', 6
 March, https://www.spca.nz/news-and-events/news-article/
 snipnchip-2024

- Statistics New Zealand (n.d.a) 'Place summaries: Palmerston North City', https://www.stats.govt.nz/tools/2018-census-place-summaries/palmerston-north-city#ethnicity
- Statistics New Zealand (n.d.b) 'Place summaries: Selwyn District', https://www.stats.govt.nz/tools/2018-census-place-summaries/ selwyn-district#ethnicity-culture-and-identity
- Statistics New Zealand (n.d.c) 'Place summaries: Tasman District', https://www.stats.govt.nz/tools/2018-census-place-summaries/ tasman-district#ethnicity-culture-and-identity
- Sumner, C.L., J.K. Walker and A.R. Dale (2022) 'The implications of policies on the welfare of free-roaming cats in New Zealand', *Animals*, 12 (3), https://doi.org/10.3390/ani12030237
- Tasman District Council (2023) 'We're putting the focus on our furry friends of the feline kind and looking to potentially introduce a Cat Bylaw ... Go to shape.tasman.govt.nz/cat-bylaw it's the purr-fect place to share your feedback!', Facebook post, 13 November, https://www.facebook.com/TasmanDistrictCouncil
- Taylor, H.S., L. Howe, C.F. Bolwell, K.J. Morgan, B. Lenting and K. McInnes (2023) 'Toxoplasma gondii exposure prevalence in little spotted Kiwi (Apteryx owenii)', *Journal of Wildlife Diseases*, 59 (1), pp.172–5, https://doi.org/10.7589/JWD-D-22-00046
- Thomas, R.L., P.J. Baker and M.D.E. Fellowes (2014) 'Ranging characteristics of the domestic cat (*Felis catus*) in an urban environment', *Urban Ecosystems*, 17, pp.911–21, https://doi.org/10.1007/s11252-014-0360-5
- Trouwborst, A., P.C. McCormack and E. Martínez Camacho (2020)

 'Domestic cats and their impacts on biodiversity: a blind spot in the application of nature conservation law', *People and Nature*, 2 (1), pp.235–50, https://doi.org/10.1002/pan3.10073
- van Heezik, Y., A. Smyth, A. Adams and J. Gordon (2010) 'Do domestic cats impose an unsustainable harvest on urban bird populations?', Biological Conservation, 143 (1), pp.121–30, https://doi.org/10.1016/j.biocon.2009.09.013
- Walker, J.K., S.J. Bruce and A.R. Dale (2017) 'A survey of public opinion on cat (*Felis catus*) predation and the future direction of cat management in New Zealand', *Animals*, 7 (7), https://doi.org/10.3390/ani7070049
- Wellington City Council (n.d.) 'Animal bylaw, dog policy and domestic animal policy review', https://www.letstalk.wellington.govt.nz/ hub-page/animal-review
- Woolley, C.K. and S. Hartley (2019) 'Activity of free-roaming domestic cats in an urban reserve and public perception of pet-related threats to wildlife in New Zealand', *Urban Ecosystems*, 22 (6), pp.1123–37, https://doi.org/10.1007/S11252-019-00886-2
- Zhu, S., E. VanWormer and K. Shapiro (2023) 'More people, more cats, more parasites: human population density and temperature variation predict prevalence of Toxoplasma gondii oocyst shedding in free-ranging domestic and wild felids', *PLOS One*, 18 (6), e0286808, https://doi.org/10.1371/journal.pone.0286808