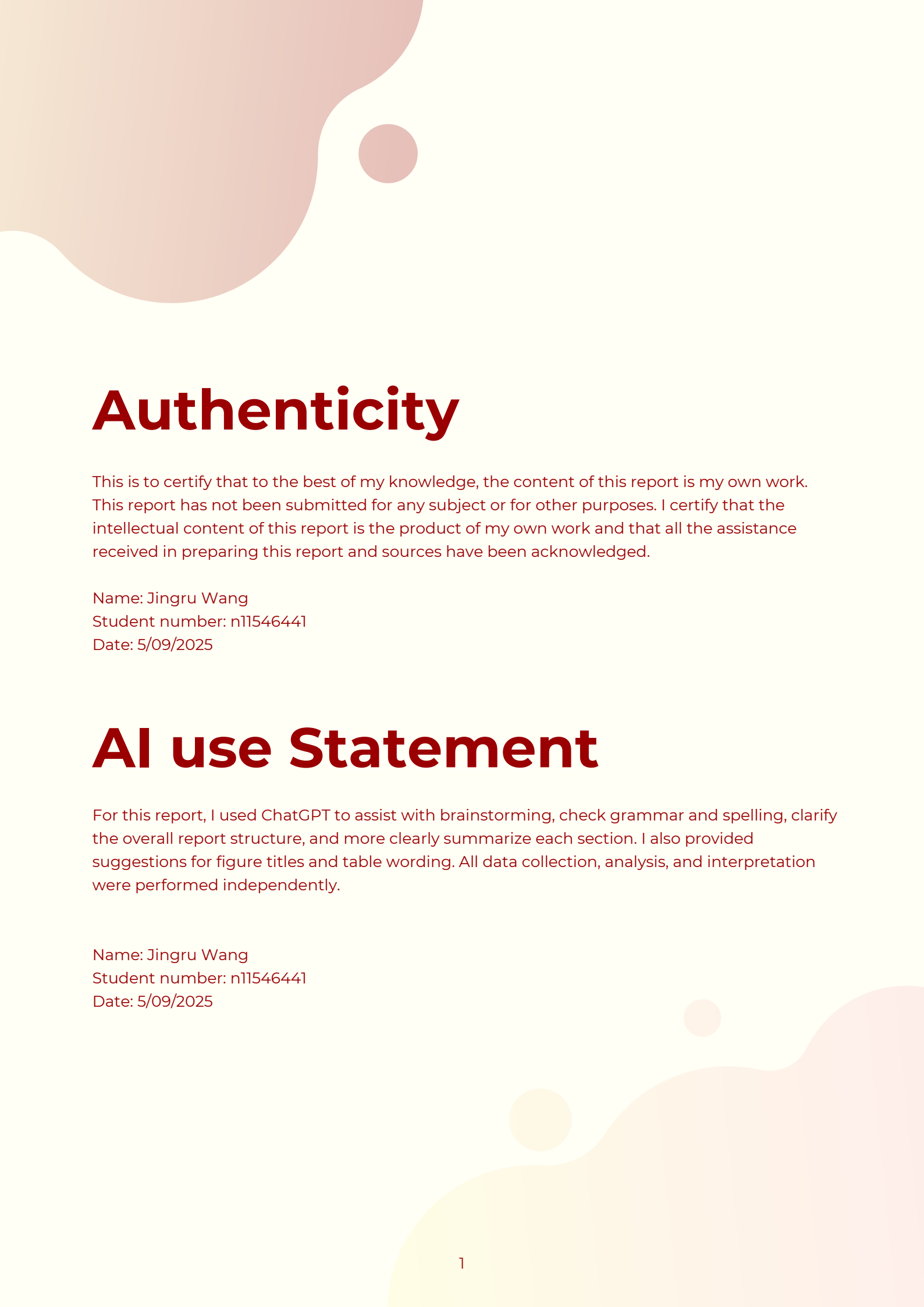




Research Report

TNR Trap Case



Authenticity

This is to certify that to the best of my knowledge, the content of this report is my own work. This report has not been submitted for any subject or for other purposes. I certify that the intellectual content of this report is the product of my own work and that all the assistance received in preparing this report and sources have been acknowledged.

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Date: 5/09/2025

AI use Statement

For this report, I used ChatGPT to assist with brainstorming, check grammar and spelling, clarify the overall report structure, and more clearly summarize each section. I also provided suggestions for figure titles and table wording. All data collection, analysis, and interpretation were performed independently.

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1.0 Introduction

This research report aims to explore the growing problem of feral cat overpopulation and examine how Trap-Neuter-Return (TNR) can effectively control feral cat populations and improve animal welfare as a humane and sustainable strategy.

The rapid growth of feral cat populations has become a significant issue severely impacting urban ecology, particularly in the absence of control measures, which increasingly puts cat populations in dire straits. According to statistics, there are currently an estimated 2.1 to 6.3 million feral cats in Australia, roaming the country and reproducing in both urban and rural areas (Nelson, 2022). As the number of stray cats continues to grow, a large number of them are born in harsh environments and face extremely high mortality rates, primarily due to factors such as starvation, disease, traffic accidents, and inclement weather.

To address this issue, TNR is increasingly being considered a sustainable alternative to traditional culling methods. This humane strategy involves safely capturing stray cats, spaying and neutering them before releasing them back into their home ranges. This approach interrupts the breeding cycle and stabilizes a healthy cat population. The core concept of TNR focuses not only on population control but also on the basic survival and well-being of the animals, avoiding unnecessary harm to the cats during implementation.

This report focuses on TNR, drawing on the Australian context and the practical experiences of volunteers, to analyze its effectiveness and limitations in humane care and improving the sustainable management of cat populations. The structure of this report is shown in Figure 1. It covers the problem context, literature review, and existing practices, followed by questionnaire surveys and interview analysis, and then continues with a discussion of key findings and design implications, ultimately laying the foundation for the second phase of product design.

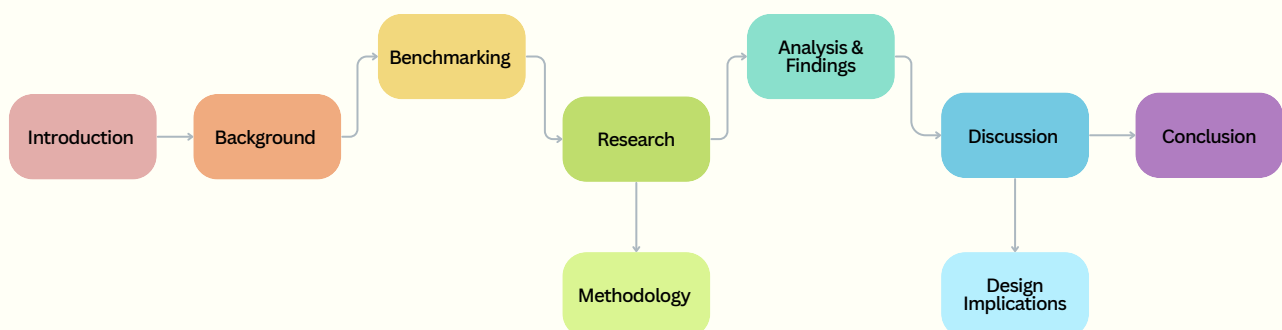


Figure 1. Overall Structure of Research Report (Source: Author, 2025)

2.0 Background

The clash between an overpopulated feral cat population and the ecological environment poses a significant challenge. Unlike domestic cats, feral cats lack human supervision and care. Their continued reproduction not only reflects the failure of long-term management strategies, but also their high reproductive capacity and lack of sterilization practices are ongoing problems.

Due to a lack of stable food sources and shelter, feral cats often face extremely low survival rates from birth, with young cats being particularly vulnerable to external threats. Among these threats, road traffic accidents are the leading cause of death, particularly for kittens. According to a study conducted by the University of Bristol, 45.6% of deaths among cats under eight years old are caused by road traffic accidents, and this figure rises to 61.2% for kittens under one year old (University of Bristol, 2025).

In Australia, feral cat populations also cause damage to the ecosystem. According to the Australian Government Department of Climate Change, Energy, the Environment and Water, feral cats kill over 1.5 billion native birds, mammals, and reptiles, as well as 1.1 billion invertebrates, each year. This predation puts immense pressure on native ecosystems, and feral cat predation threatens over 200 Australian threatened species and 37 listed migratory species (DCCEEW, 2024). The root of the problem lies in the high reproductive capacity of intact cats. Research shows that female cats can become pregnant as early as four months of age, and without intervention, an intact pair can produce up to 420,000 offspring in seven years (Content & Arcade, 2024). This rapid reproduction rate results in tens of thousands of newborn kittens each year, far exceeding the capacity of animal shelters. This reality further underscores the need for effective sterilization programs to effectively curb feral cat populations.

TNR has gained increasing attention and been implemented in numerous countries and regions as a humane, effective, and sustainable alternative. Its core process involves humanely trapping cats, sterilizing them, and then returning them to their original territories, ear cropping to facilitate identification. As early as the middle 1990s, a paper in the Journal of the American Veterinary Medical Association documented TNR as a structured community cat management approach, laying the foundation for subsequent humane management (JAVMA, 1996). Research has shown that, compared to traditional culling methods, TNR not only reduces the number of stray cats at the root of population growth but also releases cats into familiar environments, improving the overall health of the cat population and fostering a more harmonious coexistence between humans and cats (Alley Cat Allies, 2025).

Comparative modelling comparing TNR with commonly used euthanasia has shown that high-coverage TNR can stabilize or reduce stray cat populations, particularly in closed cat colonies (Schmidt, Swannack, Lopez & Slater, 2009). Meanwhile, a study in Queensland, Australia, found that although residents expressed dissatisfaction with wildlife predation and noise, most preferred humane sterilization, such as TNR, to euthanasia (Rand et al., 2024).

In summary, the ecological and animal welfare challenges posed by excessive stray cat populations are becoming increasingly serious. As an effective, humane, and sustainable strategy for controlling stray cat populations, TNR provides an important foundation and development direction for addressing these challenges.

3.0 Benchmarking

To support the design and development of a more humane, efficient, and safer stray cat trapping solution, this section will benchmark widely used cat cage products and related practices in current TNR programs. By evaluating existing products on the market, the goal is to identify their strengths and weaknesses in terms of animal welfare and practical applicability, thereby achieving collaborative volunteer workflows. This benchmarking analysis not only helps identify limitations in current designs but also provides targeted optimization guidance for subsequent design interventions, ensuring that the final solution responds to the practical challenges faced by volunteers and cat populations in real-world settings.

This study focuses on cat traps specifically designed for stray cats. These products are widely used in the first phase of TNR to safely capture cats for subsequent sterilization and release. Their core function is to effectively and safely capture stray cats, minimizing the risk of injury to both cats and operators. According to the RSPCA, high-quality traps should ensure that cats are not frightened or harmed during operation and should be easy to clean, safe, and convenient (Wandering Shire Council, 2019).

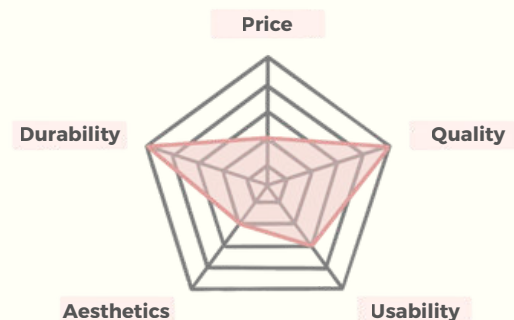
To conduct a comprehensive product evaluation, we collected and analyzed a range of cat traps currently used in TNR programs. These traps encompass a wide range of commercially available products, varying in material, mechanism, operation, and safety features. This comparison and analysis of these products identifies similarities and innovations in existing designs within the industry.

3.1 Eight TNR Cat Trap Products

PestGard Tunnel Trap MK2

Price: 409 AUD

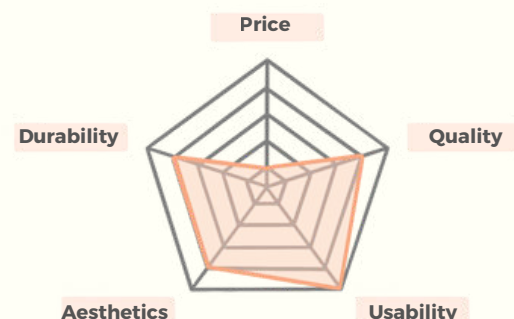
The double-door aluminum cat cage has a solid and corrosion-resistant structure, is suitable for field TNR and repeated use, has a sensitive trigger, and is easy to fold and carry.



OcuTrap

Price: 616 AUD

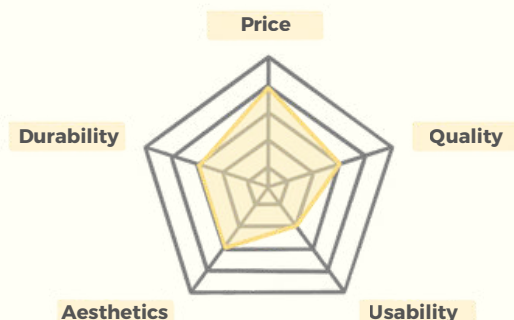
This high-tech smart cat trap supports APP remote control of door opening and closing, night vision camera, GPS positioning and image cloud processing, and is suitable for high-precision monitoring and intelligent trapping.



Neighborhood Cats Drop Trap DT 1

Price: 209 AUD

The large opening drop-door design makes it less likely for cats to be alerted, making it suitable for selective or simultaneous capture of multiple cats. The metal structure is foldable and portable.



Pestgard The Specialist Cat Trap

Price: 275 AUD

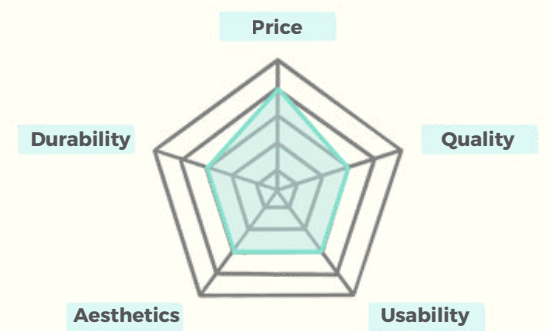
Australian-made, purpose-built cat cage with a sturdy galvanized steel structure, a safety lock design, and a rear bait door. Suitable for cats, rabbits and other animals, suitable for fixed-point use.



RYNX Trap

Price: 190.99 AUD

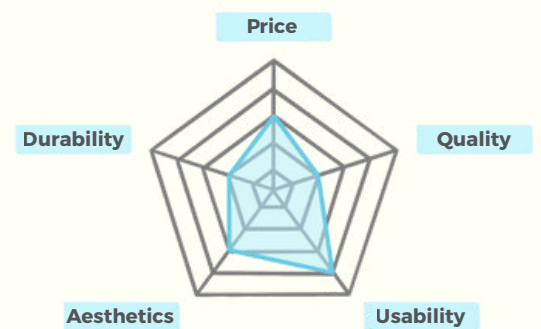
This is a lightweight and durable metal mesh cage with a pre-assembled folding cage. It is light and easy to store. The spring door lock design is humane and safe, suitable for temporary capture of stray animals.



Freeman Cage Net

Price: 259 AUD

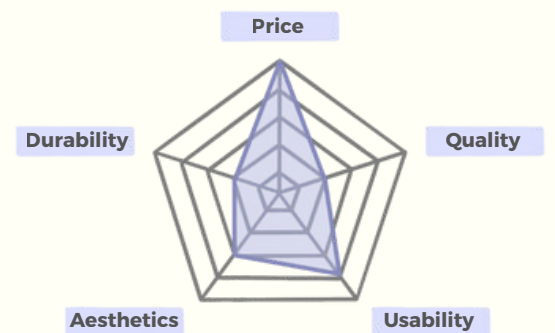
The net bag is opened or closed by sliding the handle to control the metal side rod. The net bag is soft and has a zipper at the bottom for easy inspection and release.



ACES Versa Nets

Price: 52 AUD

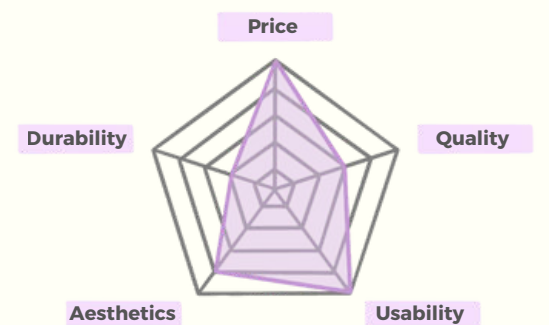
Developed by professional animal equipment brand ACES, this all-stainless steel device is durable and sturdy, featuring a large, deep mesh opening, making it ideal for quickly and remotely controlling animals.



Ecotrap Soft Net Trap

Price: 119 AUD

This is a soft trap composed of a flexible metal frame and a mesh bag. It is triggered by a trip wire to wrap the animal, reducing damage. It is suitable for trapping in cities or individual targets.



*Photos of these products can be found in the appendix at the end of the report

Figure 2. Radar-Based Evaluation of 8 TNR Cat Trap Products (Source: Author, 2025)

3.2 Comparative Benchmarking

This table provides a comparative evaluation of eight existing stray cat trap products based on eight key criteria: quality, pricing, portability, durability, usability, safety, setup/storage, and trap mechanism reliability.

	PestGard MK2	OcuTrap	Drop Trap DTI	The Specialist	RYNX Trap	Freeman Cage Net	ACES Nets	Ecotrap Soft Net
Quality	9	8	6	9	6	5	4	5
Pricing	3	4	8	6	7	8	9	9
Portability	4	5	7	3	9	7	9	9
Durability	9	8	6	9	6	4	5	5
Usability	7	8	5	6	6	7	8	9
Safety	6	9	8	6	6	4	6	8
Setup/Storage	4	7	8	3	9	7	9	10
Trap Mechanism Reliability	9	9	7	8	6	6	5	7

Table 1. Comparative Table of 8 TNR Cat Trap Products (Source: Author, 2025)

This comparison table benchmarks eight existing TNR trap products based on eight key performance criteria. The data presents each product's performance in a structured manner, highlighting the strengths and limitations of each product in the market. Products such as PestGard MK2 and OcuTrap receive high scores for quality and capture success rate, but lag behind in price and portability. In contrast, trap nets lead in both price and portability, but lack quality assurance. This analysis reveals the balance between functionality and reliability among existing products in the market, as well as gaps in some areas.

This product positioning chart compares eight cat trapping tools based on two key factors: Cat Welfare Friendliness and User Ease for Rescuers.

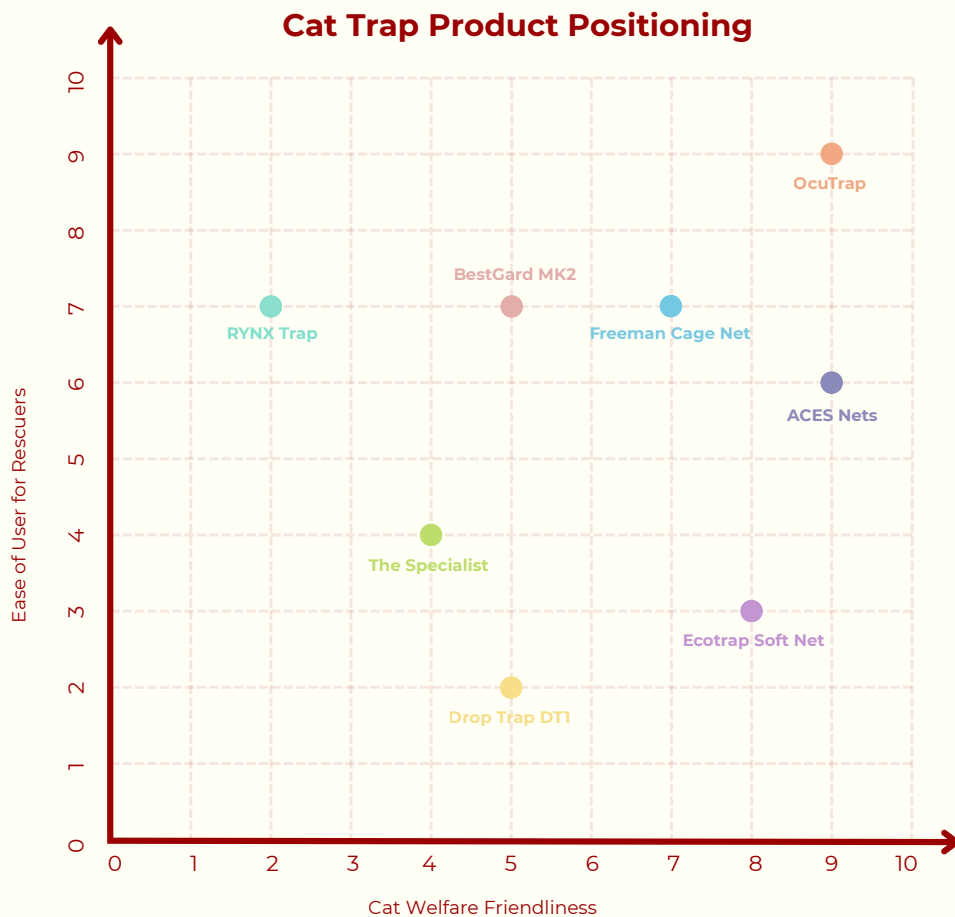


Figure 3. Product Positioning Map of 8 TNR Cat Traps (Source: Author, 2025)

The OcuTrap is clearly positioned in the upper right corner of the chart, indicating that it strikes a good balance between the two criteria, but is also relatively expensive. In contrast, the Drop Trap DTI falls toward the lower end of the chart, indicating that it falls short in both user friendliness and animal welfare. Its sudden drop mechanism and open construction often cause stress to cats. As stated in TNR guidelines, traps that startle or approach cats too suddenly can exacerbate their fear and reduce future capture success rates (FeralCat.com, 2023). The distribution of products across four quadrants indicates that no product currently on the market fully meets the dual needs of rescue efficiency and cat welfare. This provides valuable development direction for future humane cat catching products.

4.0 Research

4.1 Research Scope

This research focuses on the early capture phase of the TNR system, specifically the tools and methods used to humanely capture stray cats. The scope of the research is limited to user experience, operational challenges, and humane considerations during the trapping process. This project does not examine the entire TNR process or broader animal welfare issues, but rather focuses on the practical challenges encountered during trapping and the limitations of existing products in meeting these needs.

4.2 Methodology

To ensure the comprehensiveness and validity of our findings, this study employed a triangulation strategy, combining multiple data collection methods, multiple data analysis types, and multiple data sources. As emphasized by Denzin (2012), triangulation enhances research precision by cross-validating findings through different investigative perspectives and methodologies.

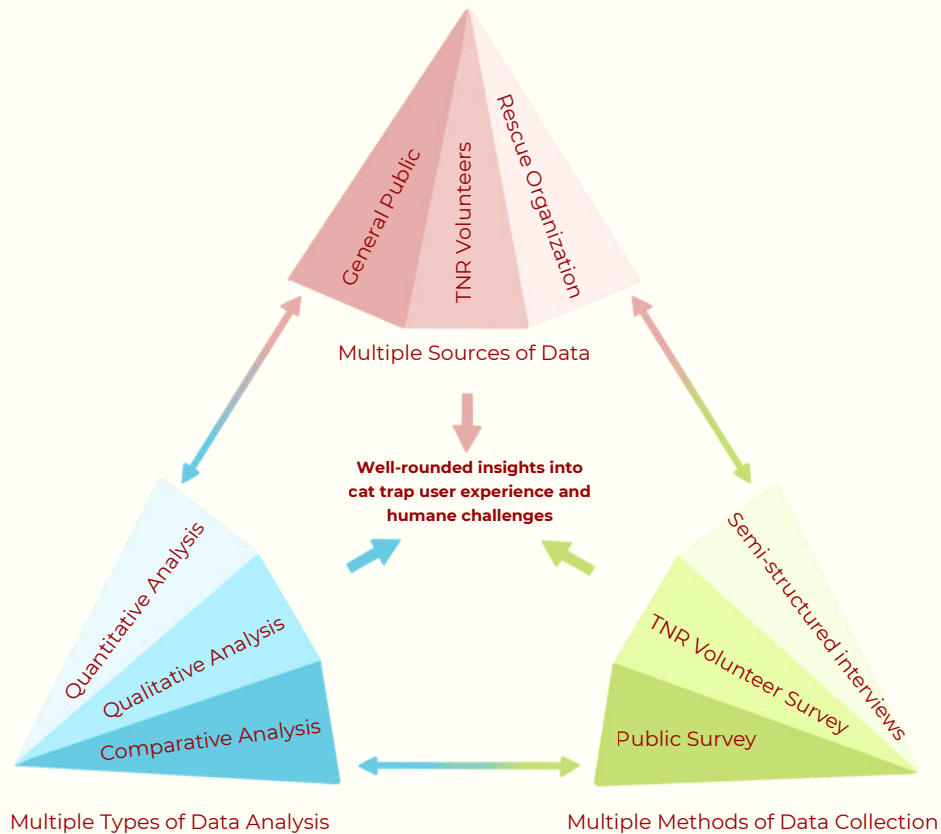


Figure 4. Triangulation Approach for TNR Cat Trap Study (Source: Author, 2025)

Application of Triangulation

Step	Method	Purpose
1	Public Survey (Quantitative)	Collect public opinions on stray cats, knowledge of TNR, and attitudes towards trapping
2	TNR Volunteer Survey (Quantitative + Qualitative)	Collect TNR volunteers' experiences on the uses and challenges of catching dragons.
3	Semi-structured Interviews (Qualitative)	Conduct a deeper exploration of TNR volunteers' capture experiences to validate and extend the findings.
4	Comparative Analysis	Cross-check public and volunteer perspectives, integrating quantitative and qualitative findings

Table 2. Application of Triangulation in the Study (Source: Author, 2025)

4.2.1 Survey Design

This study utilized two structured questionnaires, each tailored to a specific target group, to gather information on public attitudes and practitioners' experiences.

The public survey included 17 questions and took 5-10 minutes to complete, with a total of 30 valid responses collected. The TNR volunteer survey included 14 questions and took 5 minutes to complete, with a total of 15 valid responses collected.

The public questionnaire primarily explored community awareness and attitudes regarding stray cat management and TNR. The questionnaire included questions about the age and region of the surveyed population, as well as questions about attitudes toward TNR practices.

For example:

- To what extent do you agree with helping control stray cat overpopulation?
- What is your opinion of TNR as a way to manage stray cats?
- Do you have any concerns about using traps to help manage stray cats?

To ensure that respondents understood the relevant information in the questionnaire, a brief introduction to TNR methods was included, explaining the basic process and its humane purpose. This ensured that all respondents had a basic understanding of trapping tools and cat population management, thereby enhancing the validity and reliability of the data (Dillman, Smyth, & Christian, 2014).

The survey of TNR volunteers and cat rescuers focused on gathering practical experiences from individuals with direct trapping experience. The questionnaire assessed participants' experiences with traditional metal traps, asking questions

For example:

- Have you ever encountered problems with trap doors closing too loudly, or with cats escaping or being injured?

The questionnaire also included open-ended questions, allowing respondents to provide suggestions for improvements, which informed subsequent design development.

4.2.2 Interview Design

In addition to the questionnaire survey, this study also conducted semi-structured interviews with TNR volunteers and independent rescuers to gather in-depth qualitative insights. The semi-structured interviews were conducted with four participants, consisted of 20 questions, and each interview lasted approximately 30–40 minutes.

Semi-structured interviews offer a balance of consistency and flexibility, allowing for understanding interviewees' perspectives on existing issues while also providing space for in-depth exploration of personal experiences (Gill, Stewart, Treasure, & Chadwick, 2008).

Interview questions were designed to cover several key areas: the participants' TNR background, the tools and methods they typically use to trap cats, their experience with traditional cages, and the main challenges and limitations they face in catching cats.

For example:

- Have you encountered problems like traps not triggering, cats escaping, or injury/stress to the animal?
- If you could improve the trap you use, what features would you like to see?

These questions were informed by humane animal care literature and incorporated practical issues identified during the survey design process. Four participants were recruited for the interviews, including independent rescuers and volunteers affiliated with organizations such as the RSPCA. They came from four different cities: Shenzhen, Shanghai, Melbourne, and Brisbane, ensuring cultural and geographic diversity.

4.3 Limitations & Improvements

While this study's mixed-methods approach provides a comprehensive perspective, it does have some limitations. The limited number of people who responded to the questionnaire may have affected the accuracy of the data. Also, the interviewees were relatively concentrated geographically, primarily from urban areas such as Shenzhen, Shanghai, Melbourne, and Brisbane, with fewer from rural areas.

Future improvements include expanding the questionnaire to a more diverse and larger sample size, particularly in areas where TNR practices are less prevalent. Incorporating digital data, such as records of cat trap usage and capture success rates, would also enhance the objectivity of the results and provide a more robust basis for the investigation.

5.0 Analysis & Findings

5.1 Public Survey Findings

The public survey collected 30 responses, representing a diverse range of age groups and residential environments. The survey aimed to understand public perceptions of stray cat management, awareness of TNR practices, and attitudes toward humane cat trapping methods. Analyzing these results revealed specific concerns regarding humane cat trap design. The following sections will address three core questions, using visual charts to illustrate key findings.

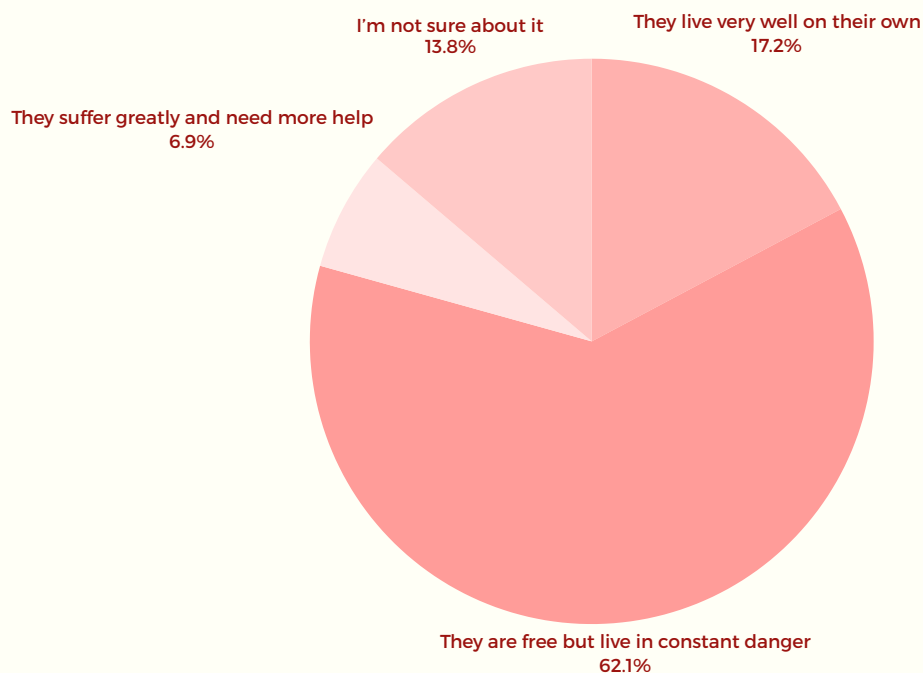


Figure 5. Public perceptions of stray cat living conditions (Source: Author, 2025)

According to the survey, when asked about the living conditions of stray cats, over 60% of respondents believed that although stray cats are free, they are constantly in danger (Figure 5). A smaller proportion, 17.2%, believed that stray cats are doing well on their own, while 13.8% were unsure. Only 6.9% believed that stray cats suffer greatly and need more help.

This reflects the varying public perceptions of the plight of stray cats, necessitating future efforts to demonstrate the real challenges faced by stray cats in different settings.

When asked whether they support TNR as a stray cat management method, the majority of respondents, 80%, expressed support, believing it is a humane solution (Figure 6). However, 13.3% of participants remained unsure, believing they needed more information to determine the effectiveness and humaneness of TNR. Only a smaller proportion, 6.7%, opposed TNR, believing there were other, better ways to help stray cats.

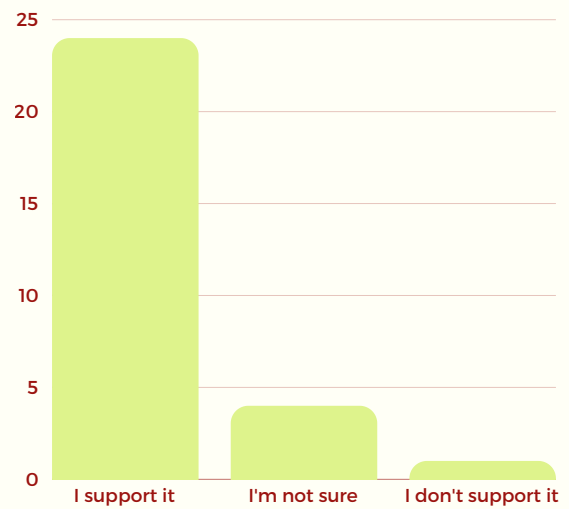


Figure 6. Public opinions on TNR as a humane solution (Source: Author, 2025)

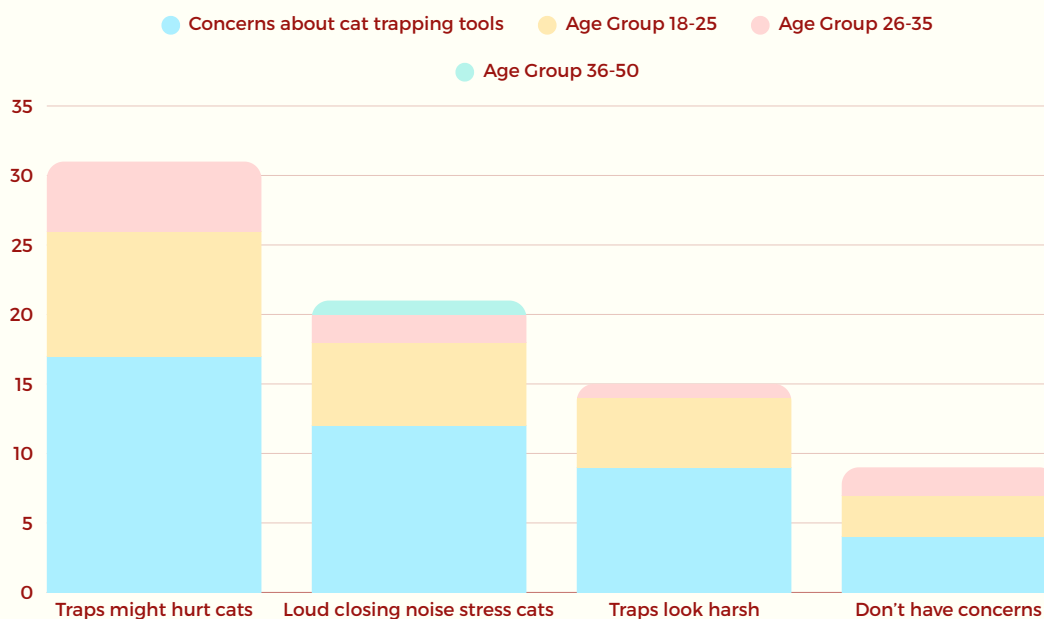


Figure 7. Public concerns about cat trapping tools (Source: Author, 2025)

Respondents expressed diverse concerns regarding the use of cat traps (Figure 7). Over half of respondents believed that cat traps could injure or frighten cats, while a significant proportion worried that the loud noise from the closing door would cause stress to cats. Looking at the age distribution, those aged 18–25 accounted for the highest proportion of concerns in almost all categories, indicating that younger respondents were more concerned about animal welfare and the stress of the trapping process. Overall, the survey results indicate that noise and animal welfare risks associated with cat traps are areas of greatest concern to the public regarding design improvements.

5.2 TNR Volunteer Survey Findings

The TNR Volunteers survey collected 15 responses, representing volunteers and independent rescuers engaged in TNR and other related work. In a questionnaire survey of TNR volunteers and related personnel, we found that half of the respondents (50%) were affiliated with the RSPCA, 25% were from the AWLQ, and another 25% were independent rescuers (Figure 8). Among the cat-catching methods used by volunteers, traditional metal cages remained the most common, accounting for 38.9%. This was followed by cardboard boxes or carrying boxes (27.8%), and a small number of people used hand capture (Figure 9). Only a small number of respondents used net traps, confirming that metal cages remain the primary method.

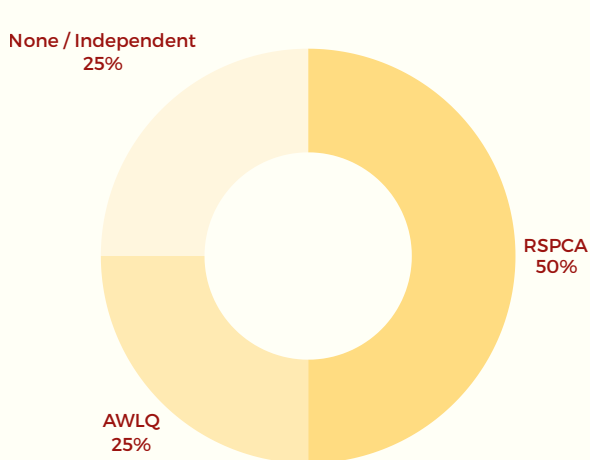


Figure 8. Affiliation of TNR volunteers and rescuers (Source: Author, 2025)

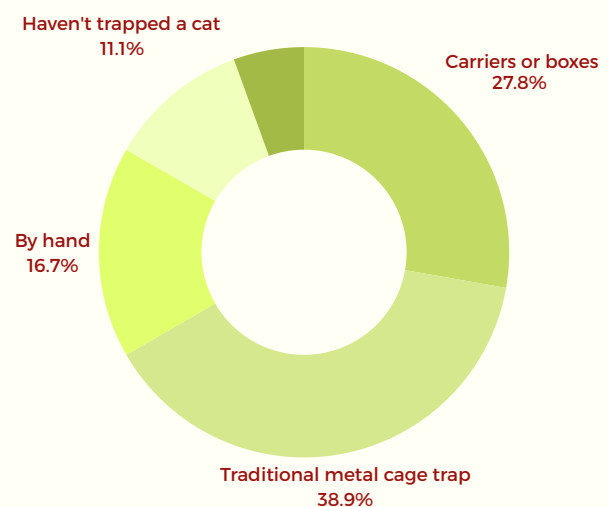


Figure 9. Trapping methods used by TNR volunteers (Source: Author, 2025)

Among the main challenges faced by volunteers, "cats completely avoid the traps" and "traps fail to trigger successfully" were the most frequently mentioned.(figure 10). These results indicate that existing cat traps have significant deficiencies in triggering and operation.

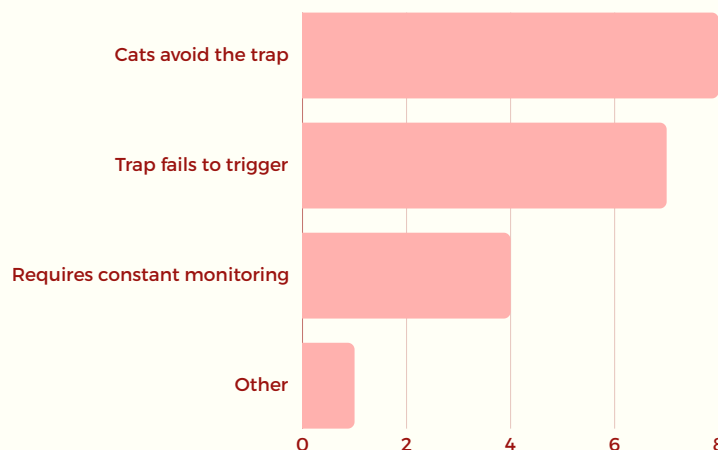


Figure 10. Challenges faced by TNR volunteers when using traps (Source: Author, 2025)

Figure 11 provides a more detailed exploration of two survey questions, focusing on whether volunteers have prior cat trapping experience and the features they would like to see added to cat trapping tools. The results in the Alluvial Diagram show that volunteers who have successfully trapped cats are more likely to choose remote camera monitoring and silent door closing features. Volunteers who have only trapped cats with assistance are also more interested in these two features. This clearly demonstrates that, based on actual operational experience, remote monitoring and silent door closing are considered important design improvements by the majority of respondents.

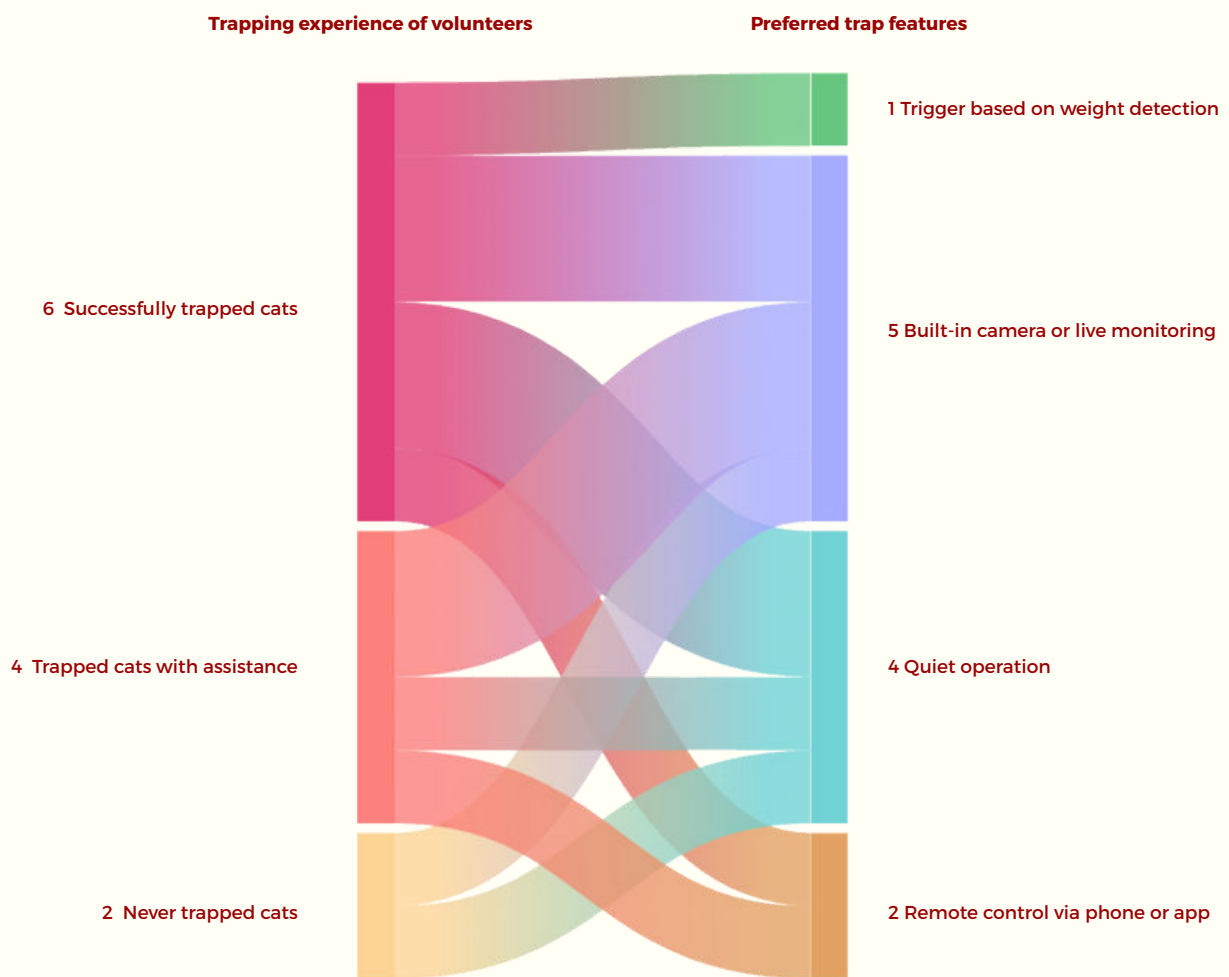


Figure 11. Relationship between trapping experience and preferred trap features (Source: Author, 2025)

5.3 Interview Findings

This report interviewed four individuals involved in TNR and stray cat management. Their diverse roles and cat-catching experiences provided diverse perspectives. These included two volunteers from independent rescue organizations in China and two volunteers from animal rescue centers in Australia. The diverse roles, regions, and tool usage among these four interviewees provided valuable information for analyzing the challenges and potential improvements to existing cat-catching tools.

Category	Code	Mentions	Example quote
Trap Performance	Loud noise when closing	7	"The sound when the door closes is very loud, kind of scary."
	Trap fails to trigger / cats escape	6	"Sometimes cats escape midway—they run off with the food."
	Heavy / hard to carry	3	"They're heavy and hard to carry."
	Tail/paw injuries	2	"One time a kitten's tail got stuck as the door closed."
Animal Welfare	Stress and fear in cats	8	"The cat panicked badly inside and kept bumping into the sides."
	Perceived harsh/intimidating design	3	"Maybe if traps could look less scary?"
User Experience	Need for constant supervision	5	"We were told never to leave it completely unattended."
	Trapping requires patience/time	2	"Sometimes I'm out there for hours and nothing happens."
	Public misunderstanding / complaints	5	"Some people in the neighborhood don't like seeing traps."
Improvement Needs	Quieter mechanism / soft door	4	"Maybe something quieter, like a door that shuts softly."
	Adjustable / lighter design	3	"Maybe something lighter, or easier to carry."

Table 3. Coded frequency of mentions from interview data (Source: Author, 2025)

Table 3 summarizes the recurring themes and their frequency across the four interviewees. The two most prominent issues were "cat stress and fear," mentioned eight times, and "loud cage door noise," mentioned seven times. These findings indicate that respondents' feedback primarily focused on animal welfare and cat trap performance, with user experience also being a concern.

A data visualization (see figure 12) clearly shows that animal welfare-related issues and cage performance deficiencies were the most frequently cited pain points. While issues such as injuries and time consumption, while less frequently mentioned, still reveal potential risks. This visualization not only reinforces the findings in the table but also helps prioritize design improvements.

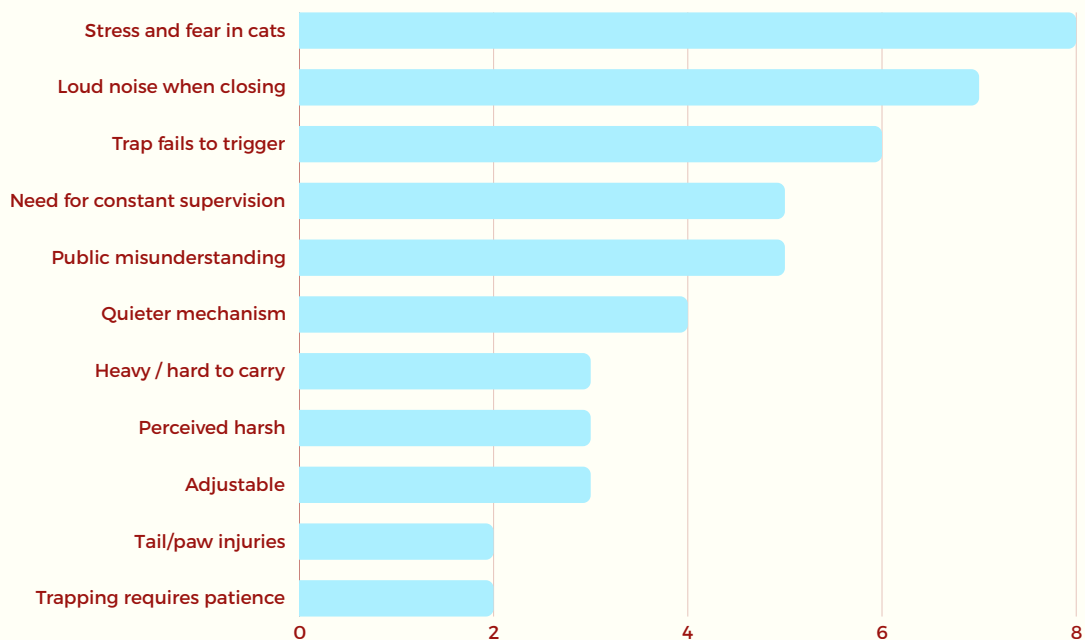


Figure 12. Visualised frequency of coded themes mentioned in interviews (Source: Author, 2025).

6.0 Discussion

The triangulated survey and interview results confirmed recurring challenges in current TNR practices. First, both the public and TNR volunteers expressed clear concerns about animal welfare, particularly the potential harm cats endure during the capture process. Second, traps suffer from significant design flaws, and interviewees emphasized the unreliability of existing cat-catching tools. The following summary delve deeper into these two key themes, further discussing the risks and hazards inherent in actual capture practices.

6.1 Animal Welfare Concerns

In public surveys, TNR volunteer surveys, and interviews, animal welfare during the trapping process was the top concern and top priority. Both public respondents and TNR volunteers emphasized that the primary issue with traditional metal traps is the loud noise generated when the cage door closes, which can cause stress and injuries to cats and complicate rescue. Interviewees described incidents of cats panicking in the cages and bumping into the wire frame, resulting in injuries. In rare cases, cats were injured by tails or paws being pinched when the door closes quickly. These findings align with existing literature, highlighting that high-stress trapping environments compromise animal welfare and reduce the effectiveness of TNR efforts.

Combined data consistently highlighted the importance of equipment noise and pressure-induced injuries to cats. Future improvements should include quieter mechanisms and softer internal structures.

6.2 Design Deficiencies

In addition to concerns about animal welfare, interviewees frequently cited functional limitations of existing cat traps. TNR volunteers and interviewees reported that cat traps often fail to trigger, sometimes even after a cat enters the trap, or trigger the mechanism too early, causing the cat to flee in fear. This requires repeated attempts by TNR volunteers and increased monitoring time. Furthermore, several female interviewees mentioned that traditional metal cat traps are too heavy and difficult to carry, especially over long distances. Furthermore, the door slams loudly and suddenly, causing cats to flee in fear, which reduces capture rates. These design flaws in existing products directly impact the usability and efficiency of the tools. To address these issues, innovative solutions, such as more reliable trigger systems and lighter designs, are needed to better support volunteers in managing stray cat populations in a humane and efficient manner.

In summary, this study highlights animal welfare issues and product design and functionality deficiencies as the two most significant challenges facing TNR volunteers in current cat trapping practices. These data provide specific priorities for future design improvements, addressing noise, stress, and injury concerns while ensuring reliability and portability.

6.3 Design Implications

The comprehensive research findings on animal welfare and design flaws provide clear design directions for the development of improved cat traps. First, noise reduction must be prioritized, with quieter door structures and softer interior materials employed to minimize stress and injury risk to cats. Second, portability and lightweighting are crucial, necessitating the use of lightweight, durable materials. Finally, the design must strike a balance between animal welfare and usability, ensuring convenient operation for volunteers while minimizing the risk of cat injury. By translating the identified issues and challenges into design principles, future products will be able to better align with the humane goals of TNR programs while improving trapping efficiency.

Must	Should	Must not
Prioritize noise reduction and adopt a quiet door closing structure	Balancing animal welfare with volunteer convenience	Makes excessive noise, causing the cat to panic or escape
Soft inner material reduces pressure and risk of injury	Provide an intuitive and convenient operating experience to reduce the burden on volunteers	Use bulky, unportable structures or materials
Lightweight and durable materials are selected to ensure the portability of the cage	Ensure effective use in different scenarios	Ignoring or sacrificing animal welfare in pursuit of efficiency

Table 4. Design criteria categorised as must, should, and must not (Source: Author, 2025).

7.0 Conclusion

This research report using a triangulated approach consisting of public and volunteer surveys and semi-structured interviews, explored the practical use of cat traps and the need for improvement, drawing on the perspectives and feedback of the public, TNR volunteers, and other stakeholders. The results revealed that the majority of respondents expressed concern about animal welfare, repeatedly citing the loud slamming of traditional metal cages as stressful and likely causing cats to flee. Design flaws in cat traps have also been a major concern, with unreliable trigger mechanisms and lack of portability contributing significantly to low capture rates. To address these concerns, future designs should prioritize quieter, lighter, and more reliable designs to better balance humaneness and practicality. Although some sample collection was limited to urban areas, it nonetheless provides valuable insights for improving cat traps and TNR stray cat management.

8.0 Reference APA7

Nelson, A. (2022, November 12). The Perils of Outdoor Cats. SclU.
<https://blogs.iu.edu/sciu/2022/11/12/the-perils-of-outdoor-cats/>

University of Bristol. (2025, April). Road traffic accidents are leading cause of death in young cats, study finds. Phys.org. <https://phys.org/news/2025-04-road-traffic-accidents-pet-cat.pdf>

Feral cats - DCCEEW. (2024, December 20). Dcceew.gov.au.
https://www.dcceew.gov.au/environment/invasive-species/feral-animals-australia/feral-cats?utm_source

JAVMA. (1996). [Article on community cat management]. Journal of the American Veterinary Medical Association, 209(12), 2016–2024.

Schmidt, P. M., Swannack, T. M., Lopez, R. R., & Slater, M. R. (2009). Evaluation of euthanasia and trap–neuter–return (TNR) programs in managing free-roaming cat populations. Wildlife Research, 36(2), 117–125. <https://doi.org/10.1071/WR08018>

Rand, J., Scotney, R., Enright, A., Hayward, A., Bennett, P., & Morton, J. (2024). A situational analysis of attitudes toward stray cats and preferences and priorities for their management. Animals, 14(20), 2953. <https://doi.org/10.3390/ani14202953>

Content, arcade. (2024, April 10). Desexing Cats & Kittens: Benefits and costs of neutering or spaying your cat. BWM. <https://bowwowinsurance.com.au/pet-community/pet-talk/desexing-cats-kittens-benefits-and-costs-of-neutering-or-spaying-your-cat/>

Trap Neuter Return (TNR). (2024, February 28). Second Chance Cats of WM.
https://sccatswm.org/resources/tnr/?utm_sourc

Wandering Shire Council. (2019). Cat trap RSPCA guide. Government of Western Australia.
<https://www.wandering.wa.gov.au/documents/12/cats-cat-trap-rspca-guide>

Levy, J. K., Gale, D. W., & Gale, L. A. (2003). Evaluation of the effect of a long-term trap-neuter-return and adoption program on a free-roaming cat population. Journal of the American Veterinary Medical Association, 222(1), 42–46. <https://doi.org/10.2460/javma.2003.222.42>

Tunnel Trap MK2. (2025). Maintrac Group. <https://www.maintracgroup.com.au/collections/cat-traps/products/tunnel-trap-mk2>

Cage Trap - Pro Version. (2025). Maintrac Group.

<https://www.maintracgroup.com.au/collections/cat-traps/products/cat-trap-pro-version>

Freeman Cage Net - Professional Trapping Supplies. (2025, August 14). Professional Trapping Supplies. <https://traps.com.au/product/freeman-cage-net/>

OcuTrap R1. (2025). OcuTrap. <https://ocutrap.com/?>

[srsltid=AfmBOooh5S9YSC5IFzx7rYXQorLZ9A0vbXkalbbtm8Jl-a7pDIYCauMW](https://ocutrap.com/?srsltid=AfmBOooh5S9YSC5IFzx7rYXQorLZ9A0vbXkalbbtm8Jl-a7pDIYCauMW)

The Specialist Cat Trap. (2025). Maintrac Group.

<https://www.maintracgroup.com.au/collections/cat-traps/products/specialist-cat-trap>

Trapping of feral cats-using soft net traps. (n.d.). Pestsmart.org.au.

<https://pestsmart.org.au/toolkit-resource/trapping-feral-cats-using-soft-net-traps-cats/>

ACES Versa Nets - ACES AU. (2025, July). Animal Care Equipment and Services. <https://animal-care.com.au/product/aces-versa-nets/>

lizsegre. (2020, May 22). Humane Trapping Instructions - Feral Cat Coalition. Feral Cat Coalition. <https://www.feralcat.com/trapping/>

Gill, P., Stewart, K., Treasure, E., & Chadwick, B. (2008). Methods of data collection in qualitative research: Interviews and focus groups. *British Dental Journal*, 204(6), 291–295.

<https://doi.org/10.1038/bdj.2008.192>

Dillman, D. A., Smyth, J. D., & Christian, L. M. (2014). *Internet, phone, mail, and mixed-mode surveys: The tailored design method* (4th ed.). Wiley. <https://www.wiley.com/en-us/Internet%2C+Phone%2C+Mail%2C+and+Mixed+Mode+Surveys%3A+The+Tailored+Design+Method%2C+4th+Edition-p-9781118456149>

Denzin, N. K. (2012). *The research act: A theoretical introduction to sociological methods* (4th ed.). Transaction Publishers.

9.0 Appendix

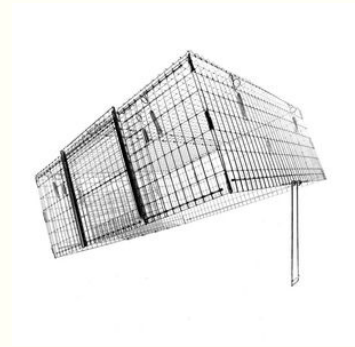
Appendix 1: Benchmarking of Existing Cat Trapping Products



PestGard Tunnel Trap MK2



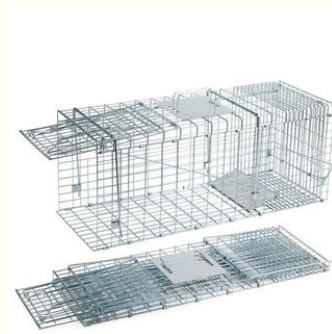
OcuTrap



Neighborhood Cats Drop Trap



Pestgard The Specialist Cat Trap



RYNX Trap



The Freeman Cage Net



ACES Versa Nets



Ecotrap Soft Net Trap

Appendix 2: Consent form

CONSENT FORM FOR CAPSTONE RESEARCH PROJECT¹

Exploring the Challenges of Stray Cat Management² and TNR Volunteer Practices³

Research team

NAME: Jingru Wang (Claire) EMAIL: n1154641@qut.edu.au PHONE: 0415468407⁴

Statement of consent⁵

By signing below, you are indicating that you:⁶

- Have read and understood the information document regarding this research project.⁷
- Have had any questions answered to your satisfaction.⁸
- Understand that if you have any additional questions you can contact the research team.⁹
- Understand that you are free to withdraw without comment or penalty.¹⁰
- Understand that if you have concerns about the ethical conduct of the research project you can contact me on email n1154641@qut.edu.au.¹¹
- Understand that the research project will include an audio recording.¹²
- Agree to participate in the research project.¹³

Please tick the relevant box below:

☐ I agree for the interview / focus group to be audio / video recorded.¹⁴

☐ I do not agree for the interview / focus group to be audio / video recorded.¹⁵

Name: _____

Signature: _____

Date: _____

Please return the signed consent form to the researcher.

Consent form signed by interviewees:

Jessie_DNB311_Consent-Form	19/08/2025 8:27 PM	Microsoft Edge PD...	225 KB
Julia_DNB311_Consent-Form	21/08/2025 9:27 AM	Microsoft Edge PD...	215 KB
Kailin Shen_DNB311_Consent-Form (1) (1) (1)	19/08/2025 8:37 PM	Microsoft Edge PD...	217 KB
LuyuHe_DNB311_Consent-Form (1) (1)	19/08/2025 4:09 PM	Microsoft Edge PD...	216 KB
Mandy_DNB311_Consent-Form	18/08/2025 11:44 PM	Microsoft Edge PD...	70 KB
Wanxin Lyu_DNB311_Consent-Form	19/08/2025 8:25 PM	Microsoft Edge PD...	222 KB
Yilin_DNB311_Consent-Form(1)	18/08/2025 11:56 PM	Microsoft Edge PD...	84 KB
Zixi Wang_DNB311_Consent-Form (1) (2)	19/08/2025 4:13 PM	Microsoft Edge PD...	221 KB
Emily_DNB311_Consent-Form	26/08/2025 1:16 AM	Microsoft Edge PD...	215 KB
Jade_DNB311_Consent-Form	26/08/2025 1:09 AM	Microsoft Edge PD...	229 KB
Lyu Jianping_DNB311_Consent-Form	26/08/2025 1:06 AM	Microsoft Edge PD...	225 KB
Wang Hongyan_DNB311_Consent-Form	26/08/2025 1:11 AM	Microsoft Edge PD...	234 KB

PARTICIPANT INFORMATION FOR CAPSTONE RESEARCH PROJECT¹

Survey for General Public²

Exploring the Challenges of Stray Cat Management³ and TNR Volunteer Practices⁴

Research team Please list all members in this section:⁵

Principal Researcher⁶: Jingru Wang Bachelor Student⁷
Unit Coordinator(s)⁸: Rafael Gomez Coordinator⁹
Alexandra Singleton Expert Industry¹⁰

School of Design/Faculty of Creative Industries, Education and Social Justice¹¹

Why is the study being conducted?¹²

This research project is being undertaken as part of an Industrial Design Capstone project for Jingru Wang, n1154641.¹³

The purpose of this project is to explore the challenges of stray cat management in Australian cities, focusing specifically on the experiences of TNR (trap-neuter-release) volunteers and animal rescue workers. The findings will help identify shortcomings and practical challenges in the TNR system, thereby providing a basis for the development of more supportive stray cat management tools and strategies.¹⁴

You are invited to participate in this research project because you are a member of the public who may encounter stray cats in daily life. Your responses will help inform public attitudes and behaviors toward stray cats. Your interactions with stray cat communities will be crucial in influencing community responses and identifying potential gaps in public awareness or behavior.¹⁵

What does participation involve?¹⁶

Participation will involve completing 12-question surveys, including Likert scale, multiple-choice, and short answer formats that will take approximately 5 minutes of your time.¹⁷

Questions will include:¹⁸

- What is your general attitude toward stray cats?
- Are you familiar with the TNR (Trap-Neuter-Return) method?
- Do you have any concerns about using traps to help control cat populations?

Your participation in this research project is entirely voluntary. If you agree to participate you do not have to complete any question(s) you are uncomfortable answering. Your decision to participate or not participate will in no way impact upon your current or future relationship with QUT or associated external organisation. If you do agree to participate you can withdraw from the research project during your participation without comment or penalty. However, as the survey does not request any personal identifying information, since it has been submitted it will not be possible to withdraw.¹⁹

Jingru Wang n1154641 Page 1²⁰

You will be able to review your responses before submitting and save a copy of your responses after submitting the survey.¹

What are the possible benefits for me if I take part?²

It is expected that this research project will not benefit you directly.³

However, the outcomes of the research, however, may benefit TNR volunteers, animal rescue organizations, and stray cats themselves through improved trapping tools and strategies. You can request a summary of the outcomes of the study by providing an email address.⁴

What are the possible risks for me if I take part?⁵

There are no risks beyond normal day-to-day living associated with your participation in this research project.⁶

What about privacy and confidentiality?⁷

All comments and responses are anonymous i.e. it will not be possible to identify you at any stage of the research, because personal identifying information is not sought in any of the responses and no traceable information is collected via the server or survey tool.⁸

Any data collected as part of this research project will be stored securely on personal computers or password protected cloud storage systems (not on public storage systems). Data will be deleted once the project is complete at the end of the semester.⁹

How do I give my consent to participate?¹⁰

The submission or return of the completed survey is accepted as an indication of your consent to participate in this research project.¹¹

What if I have questions about the research project?¹²

If you have any questions or require further information please contact the researcher:¹³

NAME: Jingru Wang (Claire) EMAIL: n1154641@qut.edu.au PHONE: 0415468407¹⁴

What if I have a concern or complaint regarding the conduct of the research project?¹⁵

The researcher is committed to research integrity and the ethical conduct of research projects. If you wish to discuss the study with someone not directly involved, particularly in relation to matters concerning policies, information or complaints about the conduct of the study or your rights as a participant, you may contact the Unit Coordinator on email (Rafael Gomez) rgomez@qut.edu.au or (Tim Williams) tim.williams@qut.edu.au.¹⁶

Thank you for helping with this research project. Please keep this sheet for your information.¹⁷

Jingru Wang n1154641 Page 2¹⁸

PARTICIPANT INFORMATION FOR CAPSTONE RESEARCH PROJECT¹

Survey for TNR Volunteers²

Exploring the Challenges of Stray Cat Management³ and TNR Volunteer Practices⁴

Research team Please list all members in this section:⁵

Principal Researcher⁶: Jingru Wang Bachelor Student⁷
Unit Coordinator(s)⁸: Rafael Gomez Coordinator⁹
Alexandra Singleton Expert Industry¹⁰

School of Design/Faculty of Creative Industries, Education and Social Justice¹¹

Why is the study being conducted?¹²

This research project is being undertaken as part of an Industrial Design Capstone project for Jingru Wang, n1154641.¹³

The purpose of this project is to explore the challenges of stray cat management in Australian cities, focusing specifically on the experiences of TNR (trap-neuter-release) volunteers and animal rescue workers. The findings will help identify shortcomings and practical challenges in the TNR system, thereby providing a basis for the development of more supportive stray cat management tools and strategies.¹⁴

You are invited to participate in this research project because you are personally involved in the rescue and management of stray cats, whether as a TNR (trap-neuter-release) volunteer or an animal shelter worker. Your experience and insights make you a representative of key end-users and stakeholders in the current stray cat management system.¹⁵

What does participation involve?¹⁶

Participation will involve completing 14-question survey, including Likert scale, multiple-choice, and short answer formats that will take approximately 10-15 minutes of your time.¹⁷

Questions will include:¹⁸

- What tools or methods have you used for cat trapping?
- What challenges have you faced when trying to trap cats?
- What features would you like to see in a more effective or humane cat trap?

Your participation in this research project is entirely voluntary. If you agree to participate you do not have to complete any question(s) you are uncomfortable answering. Your decision to participate or not participate will in no way impact upon your current or future relationship with QUT or associated external organisation. If you do agree to participate you can withdraw from the research project during your participation without comment or penalty. However, as the survey does not request any personal identifying information, since it has been submitted it will not be possible to withdraw.¹⁹

You will be able to review your responses before submitting and save a copy of your responses after submitting the survey.²⁰

What are the possible benefits for me if I take part?²¹

Jingru Wang n1154641 Page 1²²

It is expected that this research project will benefit you directly.¹

The outcomes of the research, however, may benefit TNR volunteers, animal rescue organizations, and stray cats themselves through improved trapping tools and strategies. You can request a summary of the outcomes of the study by providing an email address.²

What are the possible risks for me if I take part?³

There are no risks beyond normal day-to-day living associated with your participation in this research project.⁴

What about privacy and confidentiality?⁵

All comments and responses are anonymous i.e. it will not be possible to identify you at any stage of the research, because personal identifying information is not sought in any of the responses and no traceable information is collected via the server or survey tool.⁶

Any data collected as part of this research project will be stored securely on personal computers or password protected cloud storage systems (not on public storage systems). Data will be deleted once the project is complete at the end of the semester.⁷

How do I give my consent to participate?⁸

The submission or return of the completed survey is accepted as an indication of your consent to participate in this research project.⁹

What if I have questions about the research project?¹⁰

If you have any questions or require further information please contact the researcher:¹¹

NAME: Jingru Wang (Claire) EMAIL: n1154641@qut.edu.au PHONE: 0415468407¹²

What if I have a concern or complaint regarding the conduct of the research project?¹³

The researcher is committed to research integrity and the ethical conduct of research projects. If you wish to discuss the study with someone not directly involved, particularly in relation to matters concerning policies, information or complaints about the conduct of the study or your rights as a participant, you may contact the Unit Coordinator on email (Rafael Gomez) rgomez@qut.edu.au or (Tim Williams) tim.williams@qut.edu.au.¹⁴

Thank you for helping with this research project. Please keep this sheet for your information.¹⁵

Jingru Wang n1154641 Page 2¹⁶

Appendix 3: Survey

Survey for general public:

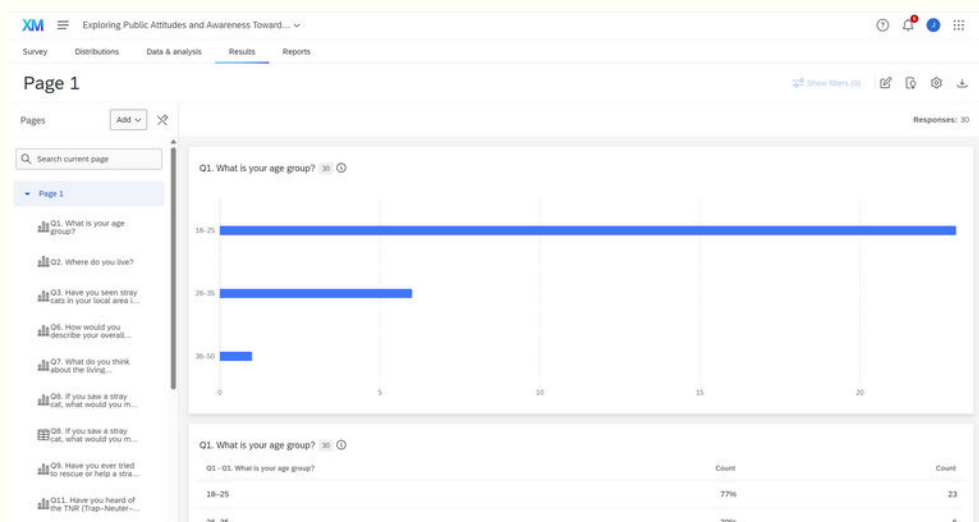
https://qualtricsxm4p6snvl8z.qualtrics.com/jfe/form/SV_eeZ8yHbbP5fK8ya

Survey for TNR volunteer:

https://qualtricsxm4p6snvl8z.qualtrics.com/jfe/form/SV_25MzHYP4StBZosm

The screenshot shows the Qualtrics survey editor interface. The survey title is "Exploring Public Attitudes and Awareness Towards Stray Cat Issues and TNR Practices". The survey is currently in "Edit question" mode. The question type is "Multiple choice". The answer type is "Allow one answer". The choices are listed as follows:

- Q1. What is your age group?
 - ☐ Under 18
 - ☐ 18-25
 - ☐ 26-35
 - ☐ 36-50
 - ☐ Over 50
- Q2. Where do you live?
 - ☐ Urban area
 - ☐ Suburban area
 - ☐ Rural area



The screenshot shows the Qualtrics Projects and Programs page. The page displays a list of projects and programs. The table below shows the details of the projects and programs.

Project name	Status	Responses	Type	Owner	Last modified	Creation date
Exploring the Challenges of Stray Cat Management and TNR Volunteer...	Active	15	Survey	Me	28 Aug 2025	12 Aug 2025
Exploring Public Attitudes and Awareness Towards Stray Cat Issues an...	Active	30	Survey	Me	4 Sep 2025	13 Aug 2025

Appendix 4: Interview

Interview Question:

- Q1. Where are you currently based, and in what area or region do you usually carry out your stray cat rescue work?
- Q2. What made you interested in helping stray cats in the first place?
- Q3. Can you tell me about your experience in stray cat rescue or TNR programs?
- Q4. How long have you been involved in this kind of work, and how did you get started?
- Q5. What is your current role – are you a volunteer, foster carer, or affiliated with an organization?
- Q6. What does a typical stray cat rescue process look like for you?
- Q7. How do you usually identify cats in need of rescue or desexing?
- Q8. What kind of areas or conditions do you often encounter when rescuing cats?
- Q9. What tools do you usually use to capture stray or feral cats?
- Q10. Have you used traditional metal cage traps before? If yes, how would you describe your experience using them?
- Q11. In your opinion, what are the strengths and limitations of traditional cat traps?
- Q12. What are the biggest challenges you face during the trapping stage?
- Q13. Have you encountered problems like traps not triggering, cats escaping, or injury/stress to the animal?
- Q14. Do you often have to supervise the trap directly, or is it possible to leave it unattended?
- Q15. If you could improve the trap you use, what features would you like to see?
- Q16. Would remote control, automatic triggering, or built-in monitoring be useful to you?
- Q17. How do you think better-designed traps could help ease your workload or improve rescue outcomes?
- Q18. How do you feel emotionally or mentally about your work with stray cats?
- Q19. What support do you think TNR volunteers or independent rescuers need most right now?
- Q20. Is there anything else you'd like to share about your experiences or tools that could help this kind of work?

Hi, thank you so much for taking the time to speak with me today. I'm currently working on a university capstone project focused on improving the tools and processes used in TNR (Trap-Neuter-Return) programs."

"This interview is just an informal conversation to learn more about your experiences and insights."

Q1: Where are you currently based, and in what area or region do you usually carry out your stray cat rescue work?"

Q2: What made you interested in helping stray cats in the first place?"

Q3: Can you tell me about your experience in stray cat rescue or TNR programs?"

Q4: How long have you been involved in this kind of work, and how did you get started?"

Q5: What is your current role – are you a volunteer, foster carer, or affiliated with an organization?"

Q6: What does a typical stray cat rescue process look like for you?"

Q7: How do you usually identify cats in need of rescue or desexing?"

Q8: What kind of areas or conditions do you often encounter when rescuing cats?"

Q9: What tools do you usually use to capture stray or feral cats?"

Q10: Have you used traditional metal cage traps before? If yes, how would you describe your experience using them?"

Q11: In your opinion, what are the strengths and limitations of traditional cat traps?"

Q12: What are the biggest challenges you face during the trapping stage?"

Q13: How do you feel emotionally or mentally about your work with stray cats?"

Q14: What support do you think TNR volunteers or independent rescuers need most right now?"

Q15: Is there anything else you'd like to share about your experiences or tools that could help this kind of work?"

Interview 1"

Interviewee: Jangping Luo"

Age: 23"

Location: Shenzhen, China"

Affiliation: Independent rescuer"

Nationality: Chinese"

Me: Thank you so much for taking the time to speak with me today. Just to remind you, this interview is part of my design research on humane stray cat rescue tools. I'll be recording the audio, but only for note-taking purposes – your identity will stay anonymous."

Interviewee (Me, Luo): No problem at all. Happy to help. I've been helping more people would pay attention to this topic."

Q1: Where are you currently based, and in what area or region do you usually carry out your stray cat rescue work?"

Me, Luo: I live in Shenzhen, and most of the cat rescue are around residential neighborhoods and old factory zones in Longhua District. Sometimes I also go to nearby areas like Bao'an if someone reports an urgent case."

Q2: What made you interested in helping stray cats in the first place?"

Me, Luo: A few years ago, I saw a kitten on the roadside that had been hit by a scooter. I couldn't sleep that night. After that, I started noticing just how many cats were being outside, hungry, sick, breeding endlessly. I just felt wrong to ignore it."

Q3: Can you tell me about your experience in stray cat rescue or TNR programs?"

Me, Luo: I've been doing it all by myself – buying traps, paying for surgeries, aftercare. I document it all on Douyin and Red notes, partly to raise awareness, partly to save tips for other people. I've probably trapped and desexed over 60 cats in the past two years."

Me: Wow, that's amazing. It sounds like a lot of commitment."

Me, Luo: It is, but it's worth it. I can't look away anymore."

Q4: How long have you been involved in this kind of work, and how did you get started?"

Me, Luo: I started in 2022. First, I helped a neighbor catch a mother cat and her kittens. We didn't even have a proper trap – just used food and a laundry basket. After that, I bought a metal trap online and never stopped."

Q5: What is your current role – are you a volunteer, foster carer, or affiliated with an organization?"

Me, Luo: I'm completely independent. No organization. I fund everything out of pocket. Some kind followers on social media donate occasionally, but most of the time, it's just me."

Q6: What does a typical stray cat rescue process look like for you?"

Me, Luo: First, I observe where the cats appear. After time, then I set up the trap with food or meat. Once trapped, I move them to a holding cage overnight and the next morning, I take them to the vet. After recovery, I return them to the same location."

Q7: How do you usually identify cats in need of rescue or desexing?"

Me, Luo: I look for kittens, pregnant females, and male cats with injury signs. If I see the same cat showing up again and again, I check if they have ear tipping. If not, they're a candidate."

Q8: What kind of areas or conditions do you often encounter when rescuing cats?"

Me, Luo: City alleys, garbage stations, under cars. Sometimes construction sites. Very noisy and dangerous environments for cats."

Q9: What tools do you usually use to capture stray or feral cats?"

Me, Luo: I mainly use a foldable metal cage trap. I also have gloves, towels, a flashlight, and sometimes a second trap if the first cat sets it off too early."

Q10: Have you used traditional metal cage traps before? If yes, how would you describe your experience using them?"

Me, Luo: Yes, that's what I use. It works most of the time, but not always smoothly. I've had cats hurt their tails – one time a kitten's tail got stuck as the door closed. I felt terrible."

Q11: In your opinion, what are the strengths and limitations of traditional cat traps?"

Me, Luo: Strength is that it's mechanical – no battery or app needed. Limitation? It's loud when the door snaps shut. It scares the cat badly. Also, smart cats learn to avoid it."

Q12: What are the biggest challenges you face during the trapping stage?"

Me, Luo: Timing. Cats are unpredictable. Also, some people in the neighborhood don't like seeing traps. They think you're hurting the animals."

Q13: Have you encountered problems like traps not triggering, cats escaping, or injury/twists to the animals?"

Me, Luo: Yes. Especially in winter when the trap mechanism gets stuck. And sometimes cats escape midway – they run off with the food and never come back, injuries happen if they panic and scratch themselves inside."

Q14: Do you often have to supervise the trap directly, or is it possible to leave it unattended?"

Me, Luo: I prefer to watch it, at least from a distance. I usually sit in my car nearby. If you leave it alone too long, anything could happen."

Q15: If you could improve the trap you use, what features would you like to see?"

Me, Luo: Softer doors, quieter mechanism. Maybe some way to reduce injury. Also,

adjustable size – some cats are huge, some tiny."

Q16: Would remote control, automatic triggering, or built-in monitoring be useful to you?"

Me, Luo: Definitely. If I could get an alert on my phone or check via a camera, that would save me so much time. And reduce stress on the cats too."

Q17: How do you think better-designed traps could help ease your workload or improve rescue outcomes?"

Me, Luo: I could trap more efficiently. And maybe more people would be willing to help if the process is less intimidating. Right now, a lot of people are scared of the equipment."

Q18: How do you feel emotionally or mentally about your work with stray cats?"

Me, Luo: It's exhausting but fulfilling. Sometimes I cry when I release a cat back safely. Other times I cry when I can't make it. But I feel like I'm doing the right thing."

Q19: What support do you think TNR volunteers or independent rescuers need most right now?"

Me, Luo: Subsidies. Vet costs are killing us. And education – people need to understand we're helping, not hurting."

Q20: Is there anything else you'd like to share about your experiences or tools that could help this kind of work?"

Me, Luo: A lot of rescuers give up after their first failed attempt. I wish there were easier starter kits. Also, better-designed traps would lower the barrier for people to get involved."

Interview 2"

Interviewee: Jade Pagani Pereira"

Age: 22"

Location: Melbourne, Australia"

Affiliation: RSPCA volunteer"

Nationality: French"

Me: Hi Jade! Thanks so much for taking the time to speak with me today."

Jade: No worries at all. I'm happy to help, especially if it's about cats."

Q1: Where are you currently based, and in what area or region do you usually carry out your stray cat rescue work?"

Jade: I'm currently based in Melbourne. I live near Fitzroy, and most of my volunteering with RSPCA is in the greater Melbourne area, especially around the Eastern suburbs."

Q2: What made you interested in helping stray cats in the first place?"

Jade: Back in France, I always loved animals, but I never really had the opportunity to volunteer. When I moved to Australia for uni, I found the RSPCA volunteer program and thought it was the perfect way to get involved and give back to the community. Seeing so many stray cats on the streets just made me want to help more."

Q3: Can you tell me about your experience in stray cat rescue or TNR programs?"

Jade: I'm still pretty new to the hands-on rescue side of things. I've only joined one trapping session with another senior volunteer. Most of the time, I work in the shelter – cleaning, feeding, and caring for the cats. But I've seen the whole TNR process from the shelter side – cats coming in for desexing and recovery before being returned."

Q4: How long have you been involved in this kind of work, and how did you get started?"

Jade: It's been about a year and a half. I applied for the RSPCA program during my second year of uni, and started helping out once a week. It started small, but now it's become something I really care about."

Q5: What is your current role – are you a volunteer, foster carer, or affiliated with an organization?"

Jade: I'm a regular volunteer with RSPCA. I've also fostered one kitten temporarily, but that was a lot of work during semester. Right now, I'm just a volunteer."

Q6: What does a typical stray cat rescue process look like for you?"

Jade: For me personally, I'm more on the care side. But I've observed the process: usually starts with someone reporting a cat or a colony. Then a team goes out to trap them. They're brought in for health checks and desexing. Then they're either adopted out or returned to their area if they're not socialized."

Q7: How do you usually identify cats in need of rescue or desexing?"

Jade: That's mostly done through community tips or RSPCA investigations. Sometimes we get calls from people feeding a colony and needing help to control the population."

Q8: What kind of areas or conditions do you often encounter when rescuing cats?"

Jade: From what I've seen, it's often back alleys, abandoned buildings, or public parks. Some cats come in really dirty, underweight, or scared. It's sad to see, but it motivates me to keep helping."

Q9: What tools do you usually use to capture stray or feral cats?"

Jade: The team uses metal cage traps mostly. I've helped set one up during my only field trip, but I haven't done it solo yet."

Q10: Have you used traditional metal cage traps before? If yes, how would you describe your experience using them?"

Jade: Yes, just once. I was kind of nervous because the cat was nervous and paced around a lot, but the trap worked, and no one got hurt. Still, it felt a bit hard to see the door slam shut."

Q11: In your opinion, what are the strengths and limitations of traditional cat traps?"

Jade: The biggest strength is they're simple and effective. But I think the door noise and sudden movement can be scary for the cats. Also, it requires someone to monitor closely – you can't just leave it and go."

Q12: What are the biggest challenges you face during the trapping stage?"

Jade: Honestly, anxiety. I was constantly worried the cat would escape or hurt itself. Timing is everything – if you're too late, you miss the chance. It's not easy."

Q13: Have you encountered problems like traps not triggering, cats escaping, or injury/twists to the animals?"

Jade: I've seen one case where the trap didn't trigger properly, and the cat ate the food and left. Another time, the cat panicked badly inside and kept bumping into the sides."

Q14: Do you often have to supervise the trap directly, or is it possible to leave it unattended?"

Jade: Yes, we used to leave it completely unattended. One had to sit nearby and watch from a distance. It's quite a time commitment."

Q15: If you could improve the trap you use, what features would you like to see?"

Jade: Maybe something quieter. Like a door that shuts more softly. Also, a remote control or alert system would be amazing so you don't have to sit and stare at the trap all day."

Q16: Would remote control, automatic triggering, or built-in monitoring be useful to you?"

Jade: Absolutely. That would make a huge difference, especially for volunteers who are stretched thin. It's safer and more efficient."

Q17: How do you think better-designed traps could help ease your workload or improve rescue outcomes?"

Jade: They could reduce stress for both cats and humans. Also, fewer failed attempts mean less time and better use of resources. The more successful the trap, the more cats we can help."

Q18: How do you feel emotionally or mentally about your work with stray cats?"

Jade: It's honestly fulfilling. There are sad moments, of course, but I feel like I'm doing something meaningful. I've learned a lot about patience and empathy."

Q19: What support do you think TNR volunteers or independent rescuers need most right now?"

Jade: More funding for vet costs, more public education, and better tools. Also, just appreciation. A lot of volunteers feel burned out or invisible."

Q20: Is there anything else you'd like to share about your experiences or tools that could help this kind of work?"

Jade: I think collaborating with tech designers like you is a great idea. People often forget how much thought and effort goes into every trap, every rescue. Making that easier could really help."

Me: Thank you so much, Jade. That was incredibly helpful."

Jade: You're very welcome! I'm excited to see what kind of design you come up with. Good luck with the project!"

Interview 3"

Interviewee: Hongqian Wang"

Age: 40"

Location: Shanghai, China"

Affiliation: Independent community caregiver"

Nationality: Chinese"

Me: Hi! Thank you so much for agreeing to this interview. Just to start off..."

Hongqian: Hello! I live in Shanghai, in a residential neighborhood in the Minhang District. Most of the stray cat work I do is just around my community – outside the buildings, in the small parks, and near the rubbish bins."

Q1: Where are you currently based, and in what area or region do you usually carry out your stray cat rescue work?"

Me: I've started feeding them about six or seven years ago. At first, I was just once or twice a week, but then they started having kittens, and then more kittens. I didn't know much at the time, but I saw I needed to do it more often. I just go on and on. I feel bad seeing the small kittens die from sickness or cold, so I decided to try and help more seriously."

Q2: What made you interested in helping stray cats in the first place?"

Hongqian: I've done quite a few TNRs on my own. I'm not part of any group, but I've joined some WeChat groups for local rescuers. Sometimes I take the cats to low-cost clinics to get them desexed. I usually cover the fees myself or occasionally get help from other caregivers."

Q3: Can you tell me about your experience in stray cat rescue or TNR programs?"

Hongqian: I've done quite a few TNRs on my own. I'm not part of any group, but I've joined some WeChat groups for local rescuers. Sometimes I take the cats to low-cost clinics to get them desexed. I usually cover the fees myself or occasionally get help from other caregivers."

Q4: How long have you been involved in this kind of work, and how did you get started?"

Hongqian: Around six years now. Like I said, it just started from feeding them. Then I joined a few local forums, learned about TNR, and gradually got help from others."

Q5: What is your current role – are you a volunteer, foster carer, or affiliated with an organization?"

Hongqian: I'm just doing this as a resident. No formal organization. I guess you could say I'm an independent caregiver."

Q6: What does a typical stray cat rescue process look like for you?"

Hongqian: Usually, I observe the cats for a few days to see their routine. If I notice one or two, I'll go and catch them. I usually use cloth bags before, which sounds strange, but for cats that are used to me, I can sometimes gently cover them and carry them in. If the cat is too wild, I ask a professional helper."

Q7: How do you usually identify cats in need of rescue or desexing?"

Hongqian: Mainly by looking – if I see a new cat without a clipped ear, or if it's a female that seems to be in heat, I know I need to act fast. Sometimes neighbors also tell me when they

see new kittens."

Q8: What kind of areas or conditions do you often encounter when rescuing cats?"

Hongqian: Mainly dirty basements, garbage collection points, construction sites. Some cats are in really bad shape – skin diseases, infections. It's quite sad. In winter, I also worry they can't find warm places."

Q9: What tools do you usually use to capture stray or feral cats?"

Hongqian: I mostly use cloth bags or pet carriers. I've also used gloves and towels. For the wild ones, at least, I might ask someone to bring a trap cage."

Q10: Have you used traditional metal cage traps before? If yes, how would you describe your experience using them?"

Hongqian: I've used them a few times, yes. They work, but only if the cat is really hungry. I feel like the smaller cats can't tell it's a trap. Some just sniff and walk away. And yes, the sound when the door closes is very loud, kind of scary."

Q11: In your opinion, what are the strengths and limitations of traditional cat traps?"

Hongqian: Well, they're useful for very wild cats that won't come near people. But they're heavy and hard to carry. Also, if you don't set it right, it might not trigger. One time, the door closed before the cat fully entered. I got scared and ran off, and I didn't see it again for weeks."

Q12: What are the biggest challenges you face during the trapping stage?"

Hongqian: The biggest challenge is that some cats are very vigilant. After seeing the cage catch other cats, they don't want to get close again. It's really hard to catch them a second time."

Q13: Have you encountered problems like traps not triggering, cats escaping, or injury/twists to the animals?"

Hongqian: Yes, cats escaping – definitely. Injury, not often, but one time a cat hurt its paw trying to get out. That made me feel terrible. Stress, for sure. Some of them pee all over the cage out of fear."

Q14: Do you often have to supervise the trap directly, or is it possible to leave it unattended?"

Hongqian: I try to stay nearby. If I leave, I'll ask neighbors to keep an eye out. I don't feel safe leaving it alone for too long."

Q15: If you could improve the trap you use, what features would you like to see?"

Hongqian: I don't know much about fancy tools – but maybe something lighter, or easier to carry. And maybe something that makes less noise when closing."

Q16: Would remote control, automatic triggering, or built-in monitoring be useful to you?"

