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Trap-Neuter-Return (TNR) Policies – Ensuring Success in Citrus Heights

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Success with Trap Neuter Return (TNR)

Trap-Neuter-Return (TNR) Policies – Ensuring Success in Citrus Heights

Submitted by

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for

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Abstract

Trap-Neuter-Return – Ensuring Success in Citrus Heights is a research study seeking to examine public policy issues associated with feral and stray cat overpopulation, explore strategies to combat related issues and develop recommendations for the City of Citrus Heights to consider as part of its overall cat management program. The literature review focuses on Trap-Neuter-Return (TNR) approaches, considered by many in animal welfare to be the key to successful feral cat population control. Surveys, key informant interviews and personal observation data provide critical components of the analysis, resulting in a comparative analysis of scholarly and anecdotal data assessed against real world applications.

The researcher has studied best practices in municipal animal services management and directed a 10-month long management study evaluating options for the City's animal services programs in 2009-10. She is currently responsible to manage the Animal Services Division for the City. The researcher is familiar with the concepts of Trap-Neuter-Return (TNR) programs and has direct experience with several variations of TNR implementation in pilot programs within the City and in neighboring jurisdictions. The researcher has a Bachelor's degree in Criminology from the University of Minnesota, Duluth; completed the National Animal Care Association (NACA) Animal Control Officer Course Levels 1 and 2; and is currently completing an EMPA in Public Administration from Golden Gate University in San Francisco, CA.

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Chapter 1 – Introduction

Purpose of the Study

The purpose of the study is to craft a comprehensive set of policy recommendations for the City to consider as a plan to cost-effectively manage its cat feral and stray cat populations. The recommendations will be based on a thorough analysis of primary and secondary data related to municipal cat management programs recognized for successful implementation of “best practices” and cost-effective funding policies associated with cats.

Research for this study includes an examination of a number of scholarly works and real-world applications of “community cat” and Trap-Neuter-Return (TNR) programs along with various supportive regulatory environments. The policy recommendations developed are intended to be cost-effective, community-supported and not staff intensive, customized to the City’s organizational constraints and opportunities. Thus, the recommendations are tailored to fit the needs of the City and the community.

Research Sub Questions

- 1) Are TNR programs that also use the community cat approach resulting in sustained decreased in nuisance cat issues in neighborhoods or areas where utilized?
- 2) What are the best practices that should be considered as required components and as ideal components for a successful TNR program?
- 3) What, if any, regulatory structures have been most effective to support successful TNR and/or community cat programs?

Assumptions

This research study includes the following Assumptions:

- A) TNR programs in general have proven effective for the long-term management of feral cat populations.
- B) There can be environmental and health impacts related to overpopulation of feral and stray cats
- C) Funding for ongoing TNR programs is critical to ensure sustained success in managing and reducing feral and stray cat populations
- D) TNR programs will likely not be successful unless supportive regulatory infrastructure is put into place.
- E) Multifamily properties such as apartment complexes and mobile home parks are common sources of feral and stray cat nuisance issues.
- F) Building rapport and trust with colony caregivers will be an essential component of a successful TNR program

Public Policy Issues

The public policy issues underlying this study are compelling for several reasons, including, but not limited to, the following: the need for fiscally sound municipal animal management practices; the importance to employ humane and effective strategies to address cat overpopulation, public health and nuisance cat issues; and a commitment to support quality of life improvements in the human and animal communities.

The problems presented by unaltered feral and stray cats left undisturbed to reproduce or unintentionally encouraged to do so by well-meaning human feeders and caregivers are many. Some of the issues often cited by the public are: defecating in gardens, children's sandboxes and play areas (health concerns); defecating, urinating and digging in yards and landscaping (property damage concerns); male (and sometimes female) territorial "spraying" of urine on doors, cars, and anything at tail height (property damage concerns); noise issues from mating and fighting cats (quality of life concerns); spreading of fleas, worms and disease to each other and domestic owned cats (and sometimes people); and injuries sustained when feral and/or stray cats battle with domestic cats (the latter two issues both primarily health related).

In addition, the financial burden upon the jurisdiction to shelter and manage unwanted cats is tremendous. In the City's 2009- 2010 animal services management study, the average cost for contracted shelter services per animal in the Sacramento region ranged between \$156 to \$205 per animal. In the case of cats, the majority (67%) were euthanized (477 of 708 in 2009-2010). This translated into an increasingly expensive and unproductive use of public funds (usually general funds) to intake, hold for legally required hold times, and ultimately euthanize cats, many of whom were feral. This leads into the public administration policy question of the best use of scarce public dollars: should the funds be deployed toward reactive strategies to deal with cats, or are there a better, proactive methods available. This project assumes there is more than one strategy to manage cats and seeks to address nuisance cat issues at their source. If this assumption is true, the next question becomes, how best to implement the selected method for cost-effective, sustained results.

About the City

The City of Citrus Heights is a typical suburban city, located outside of Sacramento, California, in the northeastern corner of Sacramento County. Incorporated in 1997, after a 12-year battle to gain its independence from the County, the City is still less than 20 years into its cityhood. The City is essentially built out, with very little industry and no major job centers. According to the City website, 53% of the population of 89,000 is housed in single-family units and 47% live in multi-family units (www.citrusheights.net). There are more than 20 miles of creeks within the fourteen (14) square miles of the City. There are also 25 parks within the City, providing over 312 acres of open and recreational space (www.citrusheights.net). Together, the creeks and parks provide extensive habitat for wildlife and feral cats.

The population density is approximately about 6350 people per square mile, and the City is essentially built out. The demographics are fairly consistent with the region and household income levels are within the average for the region. There are a few percentage points more seniors and disabled residents in Citrus Heights than the Sacramento region at large, but for the most part the demographics are similar to nearby communities.

The point of this narrative is that there is nothing special or unusual about the City. The City is committed to fiscally responsible government practices and to consistently striving to improve the quality of life for its resident and business community members, similar to jurisdictions everywhere. To that end, the City has carefully evaluated its municipal services programs over the years and where it made sense, the city shifted operations from a contract-service provision to in-house services. Today the City has a blend of in-house contracted out services seventeen years later in 2014.

Notably, in 2006 the City brought police services in-house. This move resulted **FROM** increasingly escalating service costs paired with increasingly reduced services. The move resulted **IN** millions of dollars in annual savings and significantly improved service levels. The staff is now a nationally recognized police force known for innovative community-building collaborative partnerships and integrated community policing practices. In 2009, the City was facing a similar challenge with animal services, although on a much smaller scale. A management study was commissioned in 2009 with a 12-member City Council appointed Citizen Advisory Committee (CAC) to guide the process.

The Study compared one international and six local and animal control and regulation service delivery models, ranging from full service public agency sheltering and regulation, public shelter contract and in-house field services, to non-profit/ a private contract shelter services contracts and in-house field services. The end result was a recommendation for the City to bring field services in-house and continue to contract with the County for shelter services. The new animal services division began operations on May 1, 2012. With a contract cost of \$189.27 for each animal that went to the shelter, there was a major emphasis in the first year of operations to reduce shelter intake numbers. Added to the cost factor was the fact that the majority of animals were being euthanized, an outcome viewed by the City and the community as a poor use of public funds.

At the same time the City was struggling to find more cost-effective ways to manage its lost, abandoned and unwanted animal populations, the County was going through its own operational evaluation and reconstitution. It was moving to a model of animal welfare management and sheltering proactively and comprehensively seeking to increase “live release”

rates, reduce intakes and address overpopulation and nuisance issues proactively and emphatically. This insight is relevant to this study because one of the County's proactive and emphatic focus areas is the realm of feral and stray cats. In fact, the City's current shelter services agreement with the County requires the City to develop and implement a plan to actively address feral and stray cats within the City. The "call to action" by the County tied in completely with the City's own desire to develop and implement cat management strategies that will permanently reduce shelter service costs, minimize cat nuisance complaints and avoid euthanasia of healthy cats (stray or feral) wherever possible.

The Animal Services Division Today

Today's Animal Services Division is housed in the City's General Services Department. Staffing consists of one Full Time Equivalent (FTE) Animal Services Officer (ASO) II, one 0.5 FTE ASO II and one 0.5 FTE dedicated employee for customer service and program administration. In addition, calls for service are handled by up to four (4) program assistants who answer phones, dispatch the ASOs and help walk-in customers along with the rest of their General Services Department support functions (engineering, community services, public works, etc.). The Operations Manager is responsible for the Animal Services Division under the direction of the General Services Director, who is also the "Chief of Animal Services".

The ASOs are responsible for the full spectrum of domestic animal care and regulation services ranging from bite investigations, welfare and cruelty investigations, barking complaints, vicious dog hearings, animals in traffic, injured animals, nuisance animals, public education and events, impounding stray animals and transporting to the shelter, enforcing City ordinances and

responding to community complaints as well as navigating a variety of neighbor – neighbor disputes.

For the first 18 months, the focus was mainly on start-up functions, procedures and basic programs. During that time-frame the City negotiated a new 3-year shelter services agreement with the County which set forth a rate structure that charges a lump sum for intake of between 900-1300 animals per fiscal year. Additional fees incur on an additional per day rate after five (5) days hold period for animals held for legal reasons (public safety, abandoned, rabies quarantine, etc.). As noted above, the current agreement requires the City to address the issue of healthy stray and feral cats brought into the shelter by field personnel or by citizens “over the counter”.

This is important to understand because shelters that contract with public agencies to provide municipal animal shelter and/or field services use a variety of cost allocation methodologies. Some charge the participating jurisdictions based on human population, some on a per animal basis and some on a flat fee for a range of intake types. Over the past five years, there has continued to be changes in the fee structures approach as all parties attempt to arrive at fair, transparent and administratively manageable cost allocation policies.

As part of the literature review in Chapter 2, the researcher will take a brief look at the history of animal welfare and regulation and touch on the evolution of the role of humane societies, non-profits and a variety of community stakeholders.

The bulk of the literature review will discuss the topic of Trap-Neuter-Return in detail, with specific attention to various approaches utilized to achieve successful implementation.

Chapter 3 will describe the study's data collection plan and outline the scientifically accepted protocols followed to obtain locally relevant data through a process of triangulation that may be utilized and repeated for other case studies.

Chapter 4 provides a thorough analysis and discussion of findings obtained through the data collection and a comparative analysis of the literature review with survey results, key informant interview results and participant observer data. Chapter 5 will provide conclusions, policy recommendations, next steps in a SMART action plan as well as next steps for further study. After Chapter 5, a References section is provide as well as the Appendices, the latter which includes the survey questions for each target stakeholder group and the interview questions that guided the key informant interviews.

Delimitations and Limitations

This research project will study what elements of TNR programs are critical for success and identify a spectrum of recommendations for the City to consider as it develops policies related to its cat management program. The emphasis for this study will be on feral and stray cats from a municipal management perspective. Best practices will be examined relative to implementing policies to support a cost-effective, low-staff intensive, community-supported TNR program. The operation and administration of feral cat colonies will not be covered in this study, nor will the subject of owned pet cats be addressed in great detail. A non-TNR option will not be emphasized as a part of this study as the City is contractually obligated to have some form of Community Cats/TNR program as part of its shelter services agreement with the County.

Ultimately, this research study is the next step in the City's efforts to retool its animal services program. The first step was to "stop the bleeding" of rising costs of contracted out field services. This was accomplished in May, 2012 when the City brought field services in-house. The next step is to manage the shelter services contract by addressing the volume of animals entering the shelter. Reducing the volume of feral and stray cats is the primary focus of the research study, an effort to "stop the breeding" of feral and stray cats.

Some Expected Findings

- 1) Low/no cost spay/neuter programs for feral and stray cats are necessary for effective municipal cat management program; and
- 2) Pet policies in rental properties that include proof of license and spay/neuter certificates responsible pet ownership and result in more pets on the properties being spayed and neutered.

In summary, the research study is imperative for several reasons. For some, the most important public policy issue is the fiscal impact of sheltering and potentially euthanizing stray and feral cats. For others, the driving force to complete this project springs forth from a core mission to save cats from almost certain death. There are also public health, public nuisance and quality of life issues related to feral and stray cat populations. These issues will be examined in the coming chapters, starting with the literature review in Chapter 2. In the literature review, the researcher will examine scholarly resources to related to TNR specifically and cat management strategies in general.

Definitions and Terms

AAFP: American Association of Feline Practitioners www.catvets.com

AHUS: American Humane Society of the United States

Altered: surgically sterilized by spay or castration

Community Cat: cat that lives outside typical household situation and is not considered “owned” by any one person; can be stray or feral

Euthanasia: (from Greek, meaning “good death”) act of humanely putting an animal to death

Feral Cat: a domesticated cat that has returned to the wild, or its offspring

Spay: sterilize a female animal by removing the ovaries

Sterilization: surgical removal of reproductive organs to render animal unable to reproduce

Stray Cat: a cat that is accustomed to contact with people and are generally tame

Targeted Spay-Neuter Program: dedicated spay-neuter resources to a defined geographic area

Trap-Neuter-Return (TNR): The act of trapping, sterilizing and returning a cat to the general location it was trapped

Trap-Neuter-Return-Maintain (TNRM): the act of TNR plus provision of a person responsible to monitor and care for the cats after return, including addressing any new cat arrivals.

Zoonotic Disease: infectious disease that can be transmitted from animals to humans

Chapter 2 - Literature Review

Summary and Overview of Literature Review

This chapter is focused on literature review of scholarly and non-scholarly works that will provide a brief look at the history of animal control care and regulation, the rise of cat overpopulation and associated issues, and the evolution of Trap-Neuter-Return (TNR) sterilization strategies to effectively and humanely manage unchecked cat breeding. The literature review will then shift to the focus of the study, issues, opportunities and current trends in TNR in Trap-Neuter-Return (TNR) programs for feral and stray “community” cats.

History of Animal Control

According to *Animal Control Management: A New Look at Public Responsibility* the history of the animal welfare movement dates back to the 1700s when people in England rose to defend cruelty to farm animals (Aronson, 2010). In the United States, the American Society for the Prevention of Cruelty to Animals (ASPCA) was formed in 1866 and many humane societies were established during the same time period (Aronson, 2010) After World War 2, the Humane Society of the United States formed and in 1970, the Society of Animal Welfare Administrators (SAWA) was formed, which brought together managers of humane organizations to network and share resources (Aronson, 2010).

Professional animal welfare organizations continued to mature over the next several decades, with a continuing emergence of professionalism, industry accepted animal welfare standards, and national and state laws increasingly articulating expectations for the humane

treatment of all animals, wild or domestic (Aronson, 2010; Rogers, 2009, Animal Welfare Act (1966).

Geoffrey Handy's 2001 *Animal Control Management - A Guide for Local Governments* is intended to provide an overview of the local government role in animal care and regulation. The guide asserts the importance of government provided animal care and regulation to be "essential to public health and safety" (Handy, 2001, p.1) and also outlines what services should be provided under an animal care and regulation program. For the purposes of this study, the *Guide* components under review are as follows: nuisance complaint response, health and safety law enforcement, stray/homeless animal sheltering, placement of adoptable animals, mandatory identification of dogs and cats and euthanizing of "animals neither reclaimed nor adopted" (Handy, p. 2). Handy recognizes the movement toward an increasing emphasis on cat management, particularly related to "free roaming" cats, (owned and un-owned). He attributes this largely to rabies concerns societal demand for "humane treatment of cats" (Handy, p. 8).

Cats Gone Wild

A cat is considered "feral" if it "is not socialized and exhibits some degree of wild behavior" (Kortis, 2013, p.4). A cat may become feral if left to fend for itself for a period of time and a "feral" cat could become domesticated, "if given enough time and attention" (Kortis, 2013, p. 4). Community Cats are those cats claimed by no "owner" but are maintained within the community. These "community cats" may be stray or feral and are also known as "free-roaming" cats (Kortis, 2013, p. 4). It is important to recognize there are also free-roaming "owned" cats in most communities.

Types of problems typically associated with large numbers of free roaming cats are related in a multitude of studies and include “animal welfare concerns (starvation, disease, abuse, or depredation), public health and nuisance concerns” and wildlife impacts (Schmidt, Lopez, Collier, 2006). Barrows in his 2004 examination of *Professional, ethical and legal dilemmas of trap-neuter-release* stressed the AVMA’s Committee on Environmental Issues (CEI), position on TNR programs, which recognizes many TNR programs may not be consistent with local laws, and there should be monitoring and environmental protective measures built into the programs (Barrows, 2004). A review of the AVMA-CEI website confirms the TNR debate and Barrows 2004 assertions are still an active discussion topic today (www.avma.org).

Concentrated Impacts

In the Schmidt, Lopez & Collier study (2006), the point was made that free-roaming cats tend to range less widely when provided with a basic level of care and a stable source of food, and thus will “concentrate impacts” (Schmidt, et al., 2006, p. 918) associated with the cats. This would suggest the need for local government to consider the necessity to be sensitive to the numbers of cats in any given location, regardless of the sterilization status. The AVMA 2014 policy statement encourages veterinarians to promote keeping owned cats indoors and permanent identification for all cats (<http://www.avma.org>) and does support TNR as one of several methods to reduce feral cat health, environmental and nuisance impacts.

Disease Threats

In Levy’s JAVMA article co-authored with Crawford (2004), public health issues are examined. There is a distinct recognition of disease potential, and in particular rabies transmission, related

to feral and stray cats (Levy and Crawford, 2004) which while recognized as plausible, are also tempered with the reality that of the 36 human deaths attributed to rabies between 1990-2001, “75% ...were associated with bat exposure” and “all but 2 exposures were believed to have occurred in foreign countries” (Levy and Crawford, 2004, p.1355). This is significant in that if there is a driving opposition to TNR due to the threat of rabies, the reality is that the potential for rabies exposure is rare (Levy, 2004) JAVMA discussion citing Rosatte, Power, MacInnes et al (1992) on the effectiveness of rabies vaccinations for several years post administration, also noting that rabies vaccines are an extremely cheap incorporation to a TNR program. In fact, the *PetSmart* (add copyright symbol?) grant currently in effect with the City includes rabies vaccines, possibly to assuage rabies transmission concerns.

Toxoplasmosis gondii is a disease caused by a parasitic infection that can be transmitted by cats to other animals and to people through contact with contaminated “soil, water, fruits and vegetables” (Wilken, 2012 referencing Alfonso, Thulliez, Gilot-Fromont (2006) Dubey) as well as by eating contaminated meats that are undercooked ((<http://www.cdc.gov>). The Centers for Disease Control (CDC) and Prevention website verify this assertion, noting the disease may be transmitted by accidental ingestion of cat feces contaminated with the disease, by contact with cat litter contaminated with the disease, in addition to those contacts noted above (<http://www.cdc.gov>). This disease is also contracted by eating undercooked, contaminated meats (<http://www.cdc.gov>) with venison, lamb and port being the worst offenders (Holm & Roth, 2012). TWS asserts cats are the “primary host” of toxoplasmosis and does not mention the role of uncooked meats in the disease transmission (2011).

The CDC notes the potential for *rabies* exposure occurs primarily through wildlife exposure, but also notes that rabies may be transmitted by any “warm blooded animal” (<http://www.cdc.gov>). Levy’s 2004 “Feral Cat Management”, which is Chapter 23 of *Shelter Medicine for Veterinarians and Staff* (2004) recommends cats be vaccinated during the TNR sterilization process with a 3-year vaccine and notes a single vaccination has been recorded with effectiveness for more than 3 years (Levy, 2004, p. 386). This is supported by Levy’s 2004 JAVMA discussion citing Rosatte, Power, MacInnes et al (1992) on the effectiveness of rabies vaccinations for several years post vaccination (Levy 2004).

Barrows asserts that a “whole host of disease-related concerns are raised by TNR and abandoned and feral cats in general” (Barrows, 2004, p. 1367) and chastises TNR proponents for minimizing the threat of rabies, noting several positive rabies results in cats in the United States, with costly reactive measures taken as a result (Barrows, 2004).

Cat Scratch Disease (*Bartonella nenselae*) is an infection that can be transmitted to humans by cat bites and scratches (<http://www.cdc.gov>). Levy discusses the issue of bite-related infections (Levy, 2004) and notes the tendency for bite-incidents to be “provoked from stray cats” and the bite victims tend to be “adult women” (Levy, 2004, p.1356). Levy asserts that TNR can assist with reduction in bite incidents by “reducing the stray cat population” and minimizing direct handling of stray cats (Levy, 2004, p. 1356).

Parasitic tapeworms, hookworms, and roundworms, as well as the fungal ringworm infection, are all zoonotic and can be transferred from cats to other cats, other animals and to humans (<http://www.cdc.gov>) Per Levy (2004), it is recommended that treatments be provided to infested cats at time of surgery, but notes that the long term benefits of such treatments are

unknown. Levy notes that “parasitism is the most common transmissible problem of feral cats” (Levy, 2004, p. 1356), with fleas and ear-mites the most common infections. This article also lends credence to the assertion of higher incidence of toxoplasmosis gondii and bartonella in feral cats (Levy, 2004) which is also supported by Longcore, Rich and Sullivan (2008).

Salmonella (Salmonellosis, Q-fever (*Coxiella burnetii*), and *leptospirosis* are additional bacterial diseases sometimes associated with cats and other animals (<http://www.cdc.gov>). Levy’s discussion of feral cat management in *Shelter Medicine for Veterinarians and Staff* (2004) characterizes the public health concern of rabies from cats as a matter of “much debate” (Levy, 2004, p.379) and states that “since 1981, rabid cats have outnumbered rabid dogs”, but that the majority of bite exposures from cats are from stray “provoked” bites, mainly to adult women; conversely, unprovoked dog bite exposures tend to occur to children (Levy, 2004, p.379). This is upheld from the researcher’s Participant Observer experience with bite cases in the field – the vast majority of bite cases reported to the City are associated with dog bites (79% in the past 21 months). Of the cat exposures reported to the City, 31% were classified as unprovoked.

The point Levy makes for cat management programs is that by “reducing the stray cat population”, including aggressive vaccinating for rabies and educating people to avoid contact with stray cats, potential exposure risks can be decreased significantly (Levy, 2004, p. 379). The author further notes that there have been no rabies cases associated with cat bites since 1975 (Levy, 2004). The strategy of a combination of vaccinating and education is considered a standard by the Animal Protection League of New Jersey’s *Project TNR*, which also advocates

vaccinating all cats and kittens for feline distemper (<http://aplaj.org> along with the more traditional rabies vaccinations.

Wildlife Threats and Population Control Strategies – TNR Not Included

A study conducted by University of Nebraska, Lincoln Extension (Hildreth, Vantassel, & Hygnstrom, 2010) concluded that “feral cats are invasive and pose a threat to native fauna and public health.” (Hildreth, et al, p.6). The University of Nebraska study recognized that there are jurisdictional challenges, particularly for feral cats which are not quite wildlife nor are they domestic (Hildreth, et al, p.3). In this study, a number of strategies are recommended for population control, including a robust identification system using collars and micro-chips. Responsible pet ownership practices such as keeping cats indoors if at all possible and ensuring all cats are altered, are also strongly advocated (Hildreth, et al,p.3).

In areas where there is a need to proactively deal with feral cat impacts, the University of Nebraska article provides a range of “integrated pest management” strategies, ranging from non-lethal discouragement techniques such as habitat modification to trapping and even shooting. TNR is not recommended however, based on the authors’ conclusion that TNR is not a proven method and there will still be wildlife impacts regardless of its effectiveness. The authors further assert opposition to TNR by The Wildlife Society (TWS) as a telling indicator of TNR failure and calls out the fact that the “American Society of Mammalogists support the humane elimination of feral cat colonies and restricted movements of free-ranging cats” Hildreth, et al, p. 6).

A review of the TWS website in 2014 affirms their continued position that TNR is not an appropriate tool to control feral cats, citing several studies where TNR has failed its promises to decrease feral cat populations, protect wildlife, and deal with public concerns. TWS further asserts there is no substantiation with pest control or cost savings using TNR strategies and references a clear need to reduce the number of feral cats as “an important step in toxoplasmosis prevention” (<http://joomla.wildlife.org>). As noted in the discussion of diseases, toxoplasmosis is a parasite-caused condition that is a serious health concern for “pregnant women and individuals with compromised immune systems” (<http://cdc.org>). It is most commonly transmitted by undercooked, contaminated meat but is also associated with contact with contaminated cat litter or anywhere where human contact with contaminated cat feces occurs (<http://cdc.org>).

Cited in TWF’s February 2011 “Problems with Trap Neuter Release” fact sheet is a December 12, 2004 *Journal of the American Veterinary Medical Association* (JAVMA) article comparing euthanasia against TNR strategies to manage free-roaming cats. The JAVMA study found that a sustained 75% reduction in a cat populations’ ability to reproduce (fecundity) is necessary to achieve successful population reduction over time (Anderson, Martin & Roemer, 2004). These findings support a conclusion that TNR programs utilizing sterilization alone are not sufficient to effectively reduce concentrated impacts of feral cat populations, and that other components should be considered as part of a comprehensive feral and stray cat management program.

A JAVMA article by Linda Winter (2004) is also cited by TWF in their TNR problems fact sheet. The point contended by Winter (and contested by a number of other studies) is that because of the human impact on wildlife, the need for intervention between feral cats and

wildlife, and birds in particular, is even more critical (Winter, 2004). The author disputes the accuracy of multiple studies cited by TNR advocates, and asserts that TNR “as presently practiced” does not achieve the goals of wildlife and human health protection, humane treatment of cats and wildlife, and be “scientifically defensible” (Winter, 2004, p. 1375). The author cites additional case studies where cat removal was effective where the food source/s were eliminated as part of the removal process and concludes that relative to public open spaces and wildlife area, trap and removal is the only appropriate approach (Winter, 2004). Winter also supports sanctuaries as an alternative to TNR that is better for both cats and wildlife (2004).

A similar position is held by Paul Burrows in his November 1, 2004 JAVMA article. He argues that a far more effective program to deal with feral cats will include aggressive trap and removal, increased emphasis on licensing, regulation and enforcement and comprehensive pet owner responsibility education efforts (Burrows, 2004). Hatley (2003) takes the argument into the realm of wildlife protection laws, citing TNRs inconsistency with federal laws (Migratory Bird Treaty Act and the Endangered Species Act) as well as statutory wildlife protection laws. Hatley asserts that there is potential liability for all parties involved with TNR should a migratory bird fall prey to an TNR cat (traced back to a culpable party) or a TNR colony degrade protected habitat by “killing the prey upon which these species depend for food. “ (Hatley, 2003, p. 457).

Interestingly, a 2006 study of outdoor fecal deposition by free-roaming cats suggests that the vast majority of fecal deposits are tendered by “owned cats defecating outdoors”, estimated in this study to be at the rate of 72% of the total deposited amount (Dabritz, Atwill, Gardner, Miller & Conrad, 2006, p. 74-80). Longcore, Rich and Sullivan (2009) also talks about water

quality degradation associated with feral and free roaming cat, citing Dabritz (2006) and Luria et al, (2004). The Dabritz et al study also supports the assertion that in order for a TNR program to achieve meaningful cat population reduction results, there must be resources in place to feed, water, sterilize and shelter the cats. The Dabritz et al study does not appear to support TNR programs per se, noting only that the topic is “debated” (Dabritz, et al, 2006, p.79).

Societal Attitudes – Should the People Decide?

These authors don’t address the issue of public sentiment in any level of detail. As noted by Kortis (2007), the constant fighting isn’t a win for anyone. Given the power of public opinion and the determination of the cat caregivers, a better outcome more in line with TNR opponents’ interests, could be achieved by working collaboratively to ensure TNR programs are structured with appropriate monitoring and ecological protections.

TNR is considered a preferred alternative in 36% of urban respondents versus trap and keep or trap and euthanize (Loyd, Miller, 2010). Grayson and Calver (2004) looked at a series of studies examining cat owner, non-cat owner, and veterinarian attitudes toward free-roaming cats, finding the majority of stakeholders favored cat population control measures, but more for the sake of “cat welfare issues” versus concern for wildlife protection (Grayson, Calver, 2004, p. 172-176). The Grayson & Calver discussion suggests cat management approaches emphasizing cat welfare and nuisance reduction will be better received and supported by society at large than if the focus is on wildlife protection (2004).

TNR Makes its Case

This next section provides an understanding of the evolution of sterilization strategies for feral cats and the onset of the TNR approach (Kortis, Levy, Wilken, etc).

Levy's article in the November 1, 2004 *JAVMA*), cites studies that demonstrate successful TNR efforts while still recognizing that failures do exist. Ultimately the Levy article concludes there are several different approaches to a comprehensive TNR program and reinforces the importance of an integrated approach based on the needs and characteristics of each environment. She notes, similar to Kortis (2007, 2013) and Levy (2002), that it is important to understand the level of caretaker commitment to the cats' welfare, and it is a commitment is best worked *with* versus *against*, by "warring with them" (Levy, 2004, p. 1360).

The HSUS published TNR implementation guide observes the tremendous success possible with TNR programs when "practiced throughout a community" (Kortis, 2007, p.2). The author cites examples in Queens, Newburyport and in West Valley, Utah. The emphasis Kortis makes in this guide is the importance of "proper implementation" (Kortis, 2007, p.3).

Relevant Benefits cited by TNR advocates such as Kortis, Alley Cat Allies, , Best Friends Animal Society, Lawrence, etc.) include the following (list is not exhaustive):

- 1) Reduced Nuisance Complaints (Kortis, 2013 p. 6-8), Alley Cat Allies fact sheet (2012)
- 2) Disease Control (Kortis, 2013 p. 6-8),
- 3) Rodent Control (Kortis, 2013 p. 6-8),

- 4) Reduced free-roaming cat population over time (Kortis, 2013 p. 6-8), Holtz, p4-5)
- 5) Reduced Shelter Intakes (Kortis, 2013 p. 6-8),
- 6) Reduced Euthanasia Rates (Kortis, 2013 p. 6-8),
- 7) Cheaper to TNR over time (more than just money) Best Friends Animal Society (2011)

TNR Works – When Nothing Else Does

A key in argument in support of TNR is that alternatives just don't work. Kortis talks about the failure of Trap-Remove or Trap-Euthanize in his "Neighborhood Cats TNR Handbook" (2013). He talks about the fact that trap and remove efforts have been employed for decades and the problem of cat overpopulation has only grown worse (Kortis, 2013), and (Mendes-de-Almeida, Faria, Landeau-Remy, Branco, Barata, Chame, Pereira, & Labarthe,, 2006, p 135).

One of the Reasons Trap-Kill methods don't work is called the "vacuum effect" whereby if cats are removed from a particularly location and food and water remain available, more cats will move in (Kortis, 2013 p. 9), (Mendes-de-Almeida et al, 2006). Because ALL the cats are rarely removed from a colony in trap-removal approaches, the remaining cats rapidly reproduce, particularly due to less competition for food, water and shelter (Kortis, 2013). "Caretaker resistance" is also cited by Kortis (2013) as a reason trap-remove practices don't work. People caring for colonies are very committed to the cats' welfare. Passive and even active resistance to trap-remove efforts is typical (Kortis, 2013). It is important to look at the people behind the problems and the possible solutions. As noted by several of the studies (Kortis 2010; Kortis

2013; Lawrence, 2011), caretakers “have a strong bond with the free-roaming cats they care for” and expend a great deal of time, effort and money to provide basic care for them (Centonze, & Levy 2002, p. 1633),

The caretaker may resort to risky behaviors if they feel unable to provide the care “in the light of day” (Kortis, 2013) In the Centonze & Levy article, it is noted that caretakers feel an obligation to care for the cats, but typically see themselves more as stewards than owners, feeling a sense of duty to help the animals (2002). Centonze & Levy provided a portrait of the typical caregiver as a “middle-aged, middle class, married, pet-owning woman living in a household of 2-3 people” (Centonze & Levy, 2002, p.1632). On average, the study reported caregiver spending averaged about \$5/week (Centonze & Levy, 2002).

Relocation is also not a viable option according to Kortis based on the fact that adoptable cats in colony situations are generally removed and adopted out as a standard TNR practice (2013). Kortis asserts that relocating cats to some type of sanctuary is not realistic, simply based on the feral and community cat population (2013). This is upheld by Levy & Crawford (2004,) adding the commitment of resources necessary as well as the “public affection for feral cats” (Levy & Crawford, 2004, p. 1357).

Levy, in “Feral Cat Management” (2004) notes a variety of methods to implement effective feral cat management programs, ranging from comprehensive cat colony care inclusive of veterinary care plans and extensive monitoring to very low key, volunteer-managed TNR work largely conducted under the community radar. She also discusses the more recent trend of local government support of TNR programs, mostly in an effort to control costs and reduce euthanasia. She references Orange County, Florida’s findings of reduced complaints, reduced shelter intake

numbers and decreased shelter costs after implementing a no cost feral spay/neuter program (Levy, 2004)

Multiple other success stories are featured in this Chapter of *Shelter Medicine for Veterinarians and Staff*, including a Florida university study where campus feral cats went from an ongoing nuisance issue to a successful TNR implementation with sustained results of over 50% population reduction over the 11-year study period (Levy, 2004). The important takeaway from this study is the need to ensure any new cats arriving to the colony are also sterilized and monitored (Levy, 2004).

Levy also points to failed TNR programs, usually in situations where new cats are brought into the area and not sterilized, or abandoned and absorbed into the colony even if sterilized, but by their existence the population is increased versus reduced (Levy, 2004).

Additional considerations supporting TNR program efficacy include targeting female sterilization over castrations if given the choice (Scott, Levy & Crawford, 2002) and the importance of targeting females during the breeding season to maximize impacts (Scott et al, 2002). This is affirmed by a 2006 study that evaluated the effectiveness of hysterectomies in an urban cat colony (Mendes-de-Almeida et al, 2006). In this study, the authors found that a program that performs sterilizations focused on female cats can be an effective population control method. Zawistowski asserted 2013 Cat Conference that the cost over time is higher for remove and euthanize in terms of “dollars and death” and recommending the most cost effective approach is to remove the kittens to adopt, focus on the females first and return sterilized adults.

Wildlife Threats

In response to TNR opponents' claims that feral cats have a negative impact on wildlife, an article in the Huffington Post urges the reader to consider "the true threats to wildlife – habitat destruction, pollution and climate change – in favor of scapegoating cats." (Robinson, 2013). In the Grayson and Calver (2004) study of regulations of domestic cat ownership to protect wildlife in Australia, this assertion is supported with literature review findings to the effect that while "some household cats do kill wildlife, by far the biggest threat to native animals is habitat destruction by humans" (authors citing Chaseling, 2001). The ASPCA addresses situations where feral cat colonies should not be maintained, such as "ecologically sensitive areas", areas where nuisance issues can't be resolved or where there are legitimate safety concerns for the cats (<http://aspca.org>).

Keys to Success – Best Practices

The intent of the literature review is to provide the researcher with a broad understanding of TNR evolution and associated issues, opportunities and considerations that are important to consider when determining how best to support community TNR efforts. The following paragraphs profile some core components considered by the majority of literature research to be essential for a TNR program's success, as well as additional TNR elements considered to be part of an ideal program. In general, all programs reviewed by the researcher include core components of sterilization, rabies vaccinations and ear-tipping.

Program Structure and Administration

Be **Strategic** and have a strategic plan that includes a clear understanding of program goals, objectives and the resources available (Kortis 2007). The importance of strategic planning is also noted by Aronson (2010) as an important management tool and by San Jose's "Feral Freedom" presentation at the 2013 Cat Conference. Beware of mixing TNR efforts with Rescue efforts programmatically and funding-wise to ensure TNR remains the focus of TNR programs (Kortis, 2007). There is no "one size fits all" model is a common theme in the best practices literature (Kortis, 2007). Flexibility to craft a TNR program that fits the unique needs of the community is essential (Best Friends Animal Society, 2013).

TNR should be utilized where **Appropriate** Rogers (2009) emphasizes TNR should be used where there is an existing problem and not as "a general rule" (p. 30-31). This aligns with Kortis' recommendation to refer cat nuisance complaints to TNR program as a matter of practice (Kortis, 2007). **Wildlife Sensitivity** also fits within this category. Work with wildlife agencies to address concerns about predation and look at success stories like *Project Bay Cat* (Kortis, 2007). Do not TNR in "environmentally sensitive areas" (Feral Freedom presentation, 2013).

Be **Collaborative**. The need for TNR to be a collaborative venture (Kortis, 2007) in order to have desired performance outcomes is a common theme throughout the literature (Levy & Crawford, 2004; Target Zero Institute Case Study No. 1; Schneider, ret. June 9, 2013). Aronson includes "building bridges" with people and groups that can help support animal services (2010, p. 47-51) Apartment Communities are mentioned by Lawrence (2012), Schneider (2012), as well as New Jersey's *Project TNR* (ret 02/10/2014).

Provide Subsidized Sterilization. Low or no/cost spay neuter surgeries are essential in order to truly achieve TNR performance outcomes (Kortis, 2007). This is consistent with Handy (2001) who also advocates for “mandatory sterilization of all free-roaming cats” (Handy, 2001, p. 9) and Lawrence (2012) as well as the Oklahoma Humane Federation (2005). A need to partner with private veterinarians is also important to long term success (Kortis 2007; Levy & Crawford, 2004). Kortis offers Gainesville, Florida as a model of private veterinary clinics augmenting the sterilizations provided by Operation Catnip’s clinic (Kortis, 2007).

Monitor for Disease Risks. Vaccinate for rabies and test for other disease when indicators present (New Jersey Dept of Health ret. 02/10/14); and educate to minimize handling of feral cats and provide core vaccines (Levy, 2004; Project TNR ret.02/10/14). Additional best practices vary, but may include distemper vaccinations for kittens (Project TNR; Levy, 2004), micro-chipping (ASPCA), and FeLv testing. Levy’s “Feral Cat Management” (2004) notes the AAFP recommendations to provide “core vaccines (rabies, panleukopenia, herpesvirus and calicivirus) to all cats (AAFP 2000 Report) and non-core vaccines, such as FeLv, are recommended only for cats at risk of exposure.” (AAFP, 2000, p. 385).

Minimize Risk Be aware of potential liabilities and take steps to minimize risk, including use of waivers, training, supervision of volunteers and utilization of a set of written standard practices (Kortis, 2007). Loaning traps is another potential liability. This practice of ensuring trappers have access to traps has been identified as an important component of TNR programs (Kortis, 2007). Therefore, if an agency is loaning out traps it is important to ensure some type of waiver is used and the trappers have training (Kortis, 2007).

Empower the Community Kortis emphasize the importance of training trappers and caretakers in his TNR guide (Kortis, 2007). From the perspective of best practices for local government, when citizens can be empowered to solve problems on their own, it is a win. Hurley echoes this benefit stating that TNR allows the community to “participate in the solution” (Hurley, 2013, p. 31). In the Hurley piece, recommendations for citizens setting up their own TNR programs, such as *Project TNR* in New Jersey include basic “how to” information from trapping and colony management to finding a local veterinarian to help with reduced costs for the surgeries. Similar “how to” guidelines are provided by TNR advocates across the country. Several are referenced within this study, including guides by Bryan Kortis of PetSmart Charities and published by the HSUS. There are additional comprehensive program guides available from communities across the United States, including San Francisco, San Jose and New Jersey. These TNR “guides” are easily available via the internet.

Policies/Regulations

A number of literature works looked at policies and regulations. In general, best practices sought to avoid regulations that hamper effective TNR programs (Kortis, 2007). Several articles pointed out the fact that feeding bans rarely work even if they could be enforced. Kortis notes that people who are feeding cats have a belief in the need to do so and may be quite passionate about it, sometimes to their detriment (Kortis, 2013). Lawrence (2012) echoes this premise, stating some “would willingly go to jail or pay their last dollar in fines rather than abandon these animals” (Lawrence, 2012, p. 3-4).

Regulations that penalize caregivers unable to meet 100% sterilization or vaccination rates are also frowned upon (Kortis, 2007). Several other authors agree (and advocate for

finding help for the caretakers to catch unaltered cats. Kortis advises program administrators to review ordinances as well as state laws and implement exceptions where appropriate, such as for pet limits or for licensing requirements. This practice is also supported by Holtz, in TRN Ordinances (2013). Smith, in *TakingActionForAnimals* (ret 02/06/14) recommends looking at ways to better enforce the laws you already have.

Regulations to consider adopting include sterilization requirements for free-roaming cats (Kortis, 2007). Handy echoes this suggestion in his 2001 discussion of effective “Elements of an Effective Community Cat Care and Control Program” (Handy,2001, p. 9) Mandatory pet cat and feral colony registration is also highly recommended by Handy and can be used to assist with data collection and program monitoring (Handy, 2001). The TNR requirement of ear-tipping of sterilized feral cats is also a universally recognized practice (Kortis 2007).

Data Collection and Public Outreach

Data collection is a critical component of TNR success. The data will be needed to show program success and to support funding requests. (Kortis, 2007). Lawrence stresses the fact that local governments must have data to show how well programs are doing and will also show the community whether services provided are “meeting public expectations” (Lawrence, 2012, p. 10). Focus on “measurable impacts: (*Target Zero Institute: Case Study 4: Austin Pets Alive*, ret. 02/06/2014)

Colony Identification, Networking and Data Collection

Facilitate creation of a “caretaker e-network” is important to build the caregiver collaboration and share resources (Kortis,2007). Access to training is another important

component of a successful TNR program (Kortis, 2007). Some type of data collection system is needed to track program effectiveness, which will be important to have when seeking funding and demonstrating performance levels (Kortis, 2007). And “without traps, there is no TNR” (Kortis 2007, p. 39) therefore, any successful TNR program will need to include access to traps.

Baltimore, Maryland includes TNR best practices as obligatory under their health code regulations. The requirements include an application and a series of commitments to support the health and wellbeing of the colony, subject to revocation of the TNR approval (City of Baltimore Ordinance, 2013).

Long-Term Success

Make sure you keep the process going and always be thinking about funding (Kortis 2007). Kortis discusses potential TNR funding sources, including general fund, fund-raising through non-profits, grants through organizations like PetSmart Charities, and contributions from participating caretakers and/or residents (Kortis, 2007).

Chapter 3 - Research Methodology

Research Design

This research is a blend of qualitative case study methodology utilizing questionnaires, personal observations, key informant interviews, and examination of secondary data in the form of Citrus Heights specific data obtained from staff and on the City website. The design allows the researcher to combine survey responses with data collected from interviews, previous studies conducted by the researcher and as well as field notes and personal observations. Through this

process, the researcher will examine issues and opportunities associated with TNR, evaluate best practices and develop TNR recommendations customized for the City.

There are multiple stakeholders that will be affected by the results of this study. In the community, residents with cats and people caring for un-owned and feral “community” cats are part of the problem and the solution. People who do not own cats but are negatively affected by nuisance outcomes are stakeholders of this process. Businesses, including multifamily communities also have an interest in the outcomes of this study based on the presence of cats, caregivers and potential nuisance issues.

There are also several municipal, veterinary and non-profit animal welfare stakeholders with an interest in this study, including the shelter management and staff, animal services officers, customer service staff, the city management and policy makers as well as local veterinarians and non-profits.

Data Collection Plan

Participants selected for the study include a number of jurisdictions recognized locally and within the state for success in using TNR programs to reduce stray and feral cat populations, reduce nuisance issues related to unaltered cats and reduce euthanasia numbers for healthy cats. The issue of how to sustain funding was also examined.

This qualitative research study includes elements of several types of research methods. It is a case study in that the researcher is looking at the City and the region’s history of feral and stray cat populations, cat caregiver characteristics, nuisance issues and the interactions between the various stakeholders within the study area. The study also utilizes the survey-questionnaire

research method to capture opinions, perceptions, concerns and expectations of specific populations (stakeholder groups) within the study area.

Key informant interviews and primary data from the researcher's professional work products are included to provide additional insights related to selected population characteristics, best practices, current trends and lessons learned in TNR implementation. The study also utilized researcher observations, site visits and field notes and secondary data accessed from the City.

The sections below will explain the data collection process in more detail. The targeted participants were selected to obtain data from their specific knowledge, experience and areas of expertise. The goal was to gain a broad-based understanding of TNR issues, opportunities and perspectives through analysis of the data. The sections below will discuss the rationale, methodology and analysis approach for each data collection method.

Survey Strategy and Methodology

A series of surveys designed to collect data related to the various stakeholder groups' experiences and perspectives about TNR programs was developed and disseminated during the study. The researcher quickly discovered a significant lack of response and attempted to incentivize the local surveys targeting colony caregivers. The researcher emailed reminders to the rental property managers and the Society of Animal Welfare Administrators (SAWA) listserv. In the interest of ensuring adequate and meaningful data in a timely fashion, the researcher expanded the interview and participant observer components of the study.

Surveys were designed using *Surveygizmo* to elicit general information about cost, funding, staffing and cat management policies in general were distributed to jurisdictions via a listserv for cities and counties as well as animal welfare industry members.

Additional surveys were developed and tailored to participants in the City's cat spay/neuter voucher programs which are administered by two different third-party non-profits. Twenty-six known feral cat colony caregivers in Citrus Heights were sent survey links by email with the assistance of the Sacramento Area Animal Coalition (SAAC). Incentives to respond were provided in the form of a \$50 donation to each of the two non-profits to support their cat voucher program if 50% of those surveyed completed the surveys by a date certain and a \$100 donation to each non-profit if 75% or more surveys were completed by the due date (14 days from survey distribution).

The researcher sent individually emailed survey links to a group of property managers belonging to the Citrus Heights And Multi-Family Partnership (CHAMP) with an eight-day completion by deadline. In addition, the researcher sent the same survey link to general list of rental property manager emails accessed from a city database. A reminder was sent by email to the rental property manager emails a week later with a deadline extension of 7 days.

Key Informant Stakeholder Interviews

Key informant stakeholder interview questions were developed and customized to elicit data specific to the stakeholder perspectives. Four jurisdictions were interviewed based on their experience implementing TNR programs. Interview questions common to all interviews included the key informant background and experience, evolution of TNR in the respective organizations,

program funding, TNR success in reducing nuisance complaints and euthanasia rates, recommendations for regulations, and key ingredients for a successful TNR program.

Interviews were also conducted with key stakeholders representing the two non-profit animal welfare groups that administer the City's spay-neuter voucher program. In addition to the core interview questions described above, these stakeholders were also asked questions related to TNR opportunities and challenges within this region and specific to their experience within the City environment.

The last group of key informant interviews involved the City animal services officers as well as three program assistants responsible for customer service and program administration. The interview structure for the animal services officers mirrored that of the jurisdiction and non-profit interviews in that the open-ended questions focused on general TNR experience within their respective professional careers as well as the unique aspects of TNR implementation in the City. In the customer service staff interviews, the participants were asked about the customer interface relative to community support, nuisance complaint management and community perception of the level of responsive animal services.

In all the interviews, participants were asked to identify the most important components of a successful TNR program.

The table on the next two pages summarizes each stakeholder group and the rationale for targeting the selected populations.

Population	Data Collection Strategy	Rationale for Targeting Population	Success
International City/County Management Association (ICMA) Survey Subgroup 1	Survey 1 administered through the ICMA Knowledge Network listserv;	Seeking local government administrators' input relative to budget and big picture management	Minimal
League of California Cities Survey Subgroup 1	Survey 1 Administered through League of California listserv	Seeking local government administrators' input relative to budget and big picture management	Minimal
Society for Animal Welfare Administrators (SAWA) Survey Subgroup 1	Survey 1 administered through SAWA listserv	Seeking administration input from animal welfare organization administrators	limited
Sacramento Area Animal Coalition (SAAC) Survey Subgroup 2	Survey 2A administered to cat colony caregivers in Citrus Heights; included incentive to motivate responses	Seeking input on voucher program effectiveness, colony characteristics and regulatory environment	Good after incentivizing; but sample size only 26
River City Cat Rescue (RCCR) Survey subgroup 3	Survey 2B administered to cat voucher recipients in Citrus Heights under the PetSmart Charities grant program	Seeking input on voucher program effectiveness, colony characteristics and regulatory environment	Minimal – most emails rejected; most participants did not provide emails, thus only got a few responses –did not include survey in final study
Citrus Heights And Multi-Housing Partnership (CHAMP) Survey Subgroup 4	Survey 3 administered to active participants in CHAMP	Seeking input cat issues in multi-family housing communities	Limited
Citrus Heights Rental Property Managers Survey Subgroup 4	Survey 3 administered to general 2012 database of rental property managers;	Seeking assessment of the degree of perceived problems, level of education about cat issues and TNR; seeking to ascertain level of pet policies and what the pet policies included; regulatory interest	Limited
Stakeholder Interviews Interviewees 7 & 8	RCCR Trappers Conducted 02/07/2014	Rescue and Trapper perspectives on TNR implementation; regulatory environment	Excellent

Population	Data Collection Strategy	Rationale for Targeting Population	Success
Stakeholder Interviews (County shelter) Interviewees 4, 5 & 6	Animal Shelter TNR program managers and support staff Conducted 02/07/2014	TNR implementation challenges, opportunities and regulatory recommendations	Excellent
Key Informant Interview Interviewee 10	SAAC feral cat and community education expert Conducted 02/11/2014	Voucher programs, feral cat colony and caregiver characteristics, supportive regulatory recommendations	Excellent; recommended interviewing local vet
City Animal Services Interview Interviewee 1	City of Upland Conducted 02/05/14	TNR program implementation and future plans	Excellent
City Animal Services Interview Interviewee 2	City of San Jose Conducted 02/06/2013	TNR program implementation; funding, sustainability; nuisance resolution	Excellent
City Animal Services Interviewee 9	City of Elk Grove Conducted 02/10/2014	Colony registration, micro chipping, budget, lessons learned	Excellent
City ASOs and Program Assistants Interviewees 11, 12,13,14, 15	City of Citrus Heights Conducted between 02/011 and 02/18/2014	Regulatory and effectiveness	Excellent

Participant Observer

The researcher utilized the participant observer method to collect and analyze data from her work as the animal services supervisor for the City. In this role, the researcher was able to leverage her administrative, customer service and field experience and expertise to test the discoveries within the literature review and survey data. This provided additional triangulation to incorporate further validity into the study. The Participant Observer component of the study also

included primary data collected during a 10-month management study of the City's Animal Services Program.

Data Analysis

The data was collected, aggregated, compared and contrasted with the literature review and the researcher's professional expertise to analyze and assess the most likely TNR policy elements to be recommended for the City. The data analysis will examine the various TNR issues and perspectives discovered in the literature review and assess each major area of concern through the lens of TNR applications within the state and locally. Core variables analyzed include health and nuisance issues, funding, regulation, characteristics common to success, and stakeholder recommended next steps for the City to consider related to cat management policies.

Study Validity

The research study utilized a number of data collection strategies and techniques to ensure process integrity and validity. Triangulation is achieved by sampling real world situations in the state and region and comparing the various data findings. The key informant interviews were designed to elicit a broad spectrum of perspectives relative to TNR implementation, including candid input on variables contributing to situations where TNR is not appropriate. The data collection process included extensive research tested against data collected in the region and the state, utilizing survey-questionnaire formats, interviews, field notes and researcher observations. Pilot TNR projects currently underway in the City provide additional validity to the study, and are referenced within the key informant interviews and survey questionnaires.

The survey questions developed for the colony caregivers were designed to elicit characteristics about the respondent, the feral or stray cat colonies supported, and experience with the City's two spay/neuter voucher programs. The survey also collected data regarding respondent opinion on regulations and TNR program guidelines. The final questions of the colony caregiver survey dealt with respondent experience with the City's animal services program, sought examples of organizations or groups the respondent felt are "doing things right" and allowed for additional ideas and comments.

A semi-structured interview approach was selected for the key informant interviews. The questions are related to the researcher's own literature review, intended to assess TNR applications in the state and the greater Sacramento region. The semi-structured interview process allows participants to provide additional feedback, with the intent of identifying common themes within the literature review and primary data analysis and further validation. This triangulation of data will allow the researcher to link discoveries from the literature review to primary data collected and result in replicable findings to incorporate into policy recommendations and next steps for the City to consider.

Informed Participation

The researcher included an introduction about the study and a commitment to confidentiality for the Survey Gizmo respondents. Assurances of protecting confidentiality was particularly important for the 26 Citrus Heights colony caregivers, thus the researcher distributed the survey for that subgroup with the assistance of the SAAC staff who emailed the survey link to the targeted stakeholders directly.

The researcher similarly advised the key informant participants of the nature of the study and offered to maintain anonymity for these stakeholders as well. Not all participants requested anonymity; however, for the sake of uniformity, key informants will be classified as Key Informants 1-15. In summary, the researcher developed a comprehensive data collection plan to conduct a qualitative idiographic study of TNR issues and opportunities in Citrus Heights. The case study format allows the researcher to test selected jurisdictional and stakeholder perceptions and realities related to TNR implementation variables. In Chapter 4, the researcher will share disclosures from the data collection and analyze the various data points in a compare and contrast approach with the assertions found in the literature review.

Chapter 4 – Results and Findings

The following sections provide a thematic summary and methodical examination of data obtained through survey-questionnaires, , key informant interviews , participant observations, compared with the literature review in order to achieve a comprehensive analysis of TNR perspectives related to key data points. The analysis will inform policy and program recommendations for the City to consider as it develops long term free-roaming cat management strategies.

Survey Subgroup 1- ICMA, League of California Cities and SAWA Data

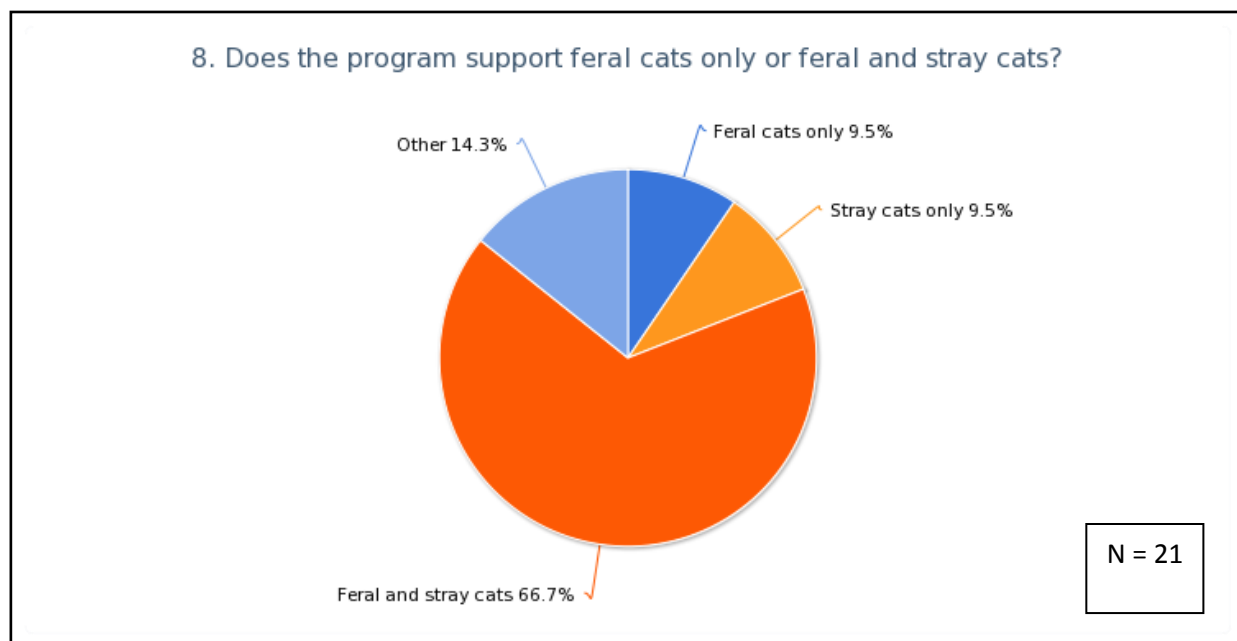
The first survey instrument, the “listserv survey”, was administered to the International City-County Management Association (ICMA), the League of California Cities and the Society of Animal Welfare Administrators (SAWA). Twenty-five (25) respondents participated in the survey, the majority of whom represented animal care and or regulation organizations.

Jurisdictional populations range from 5,000 to 1,200,000. The majority of respondents operate an animal shelter with several contracting out for services and one respondent who only runs a TNR program. The analysis of this subgroup data focuses on the themes related to TNR program characteristics, nuisance reduction, community support, best practices and key ingredients for TNR success.

TNR Program Data

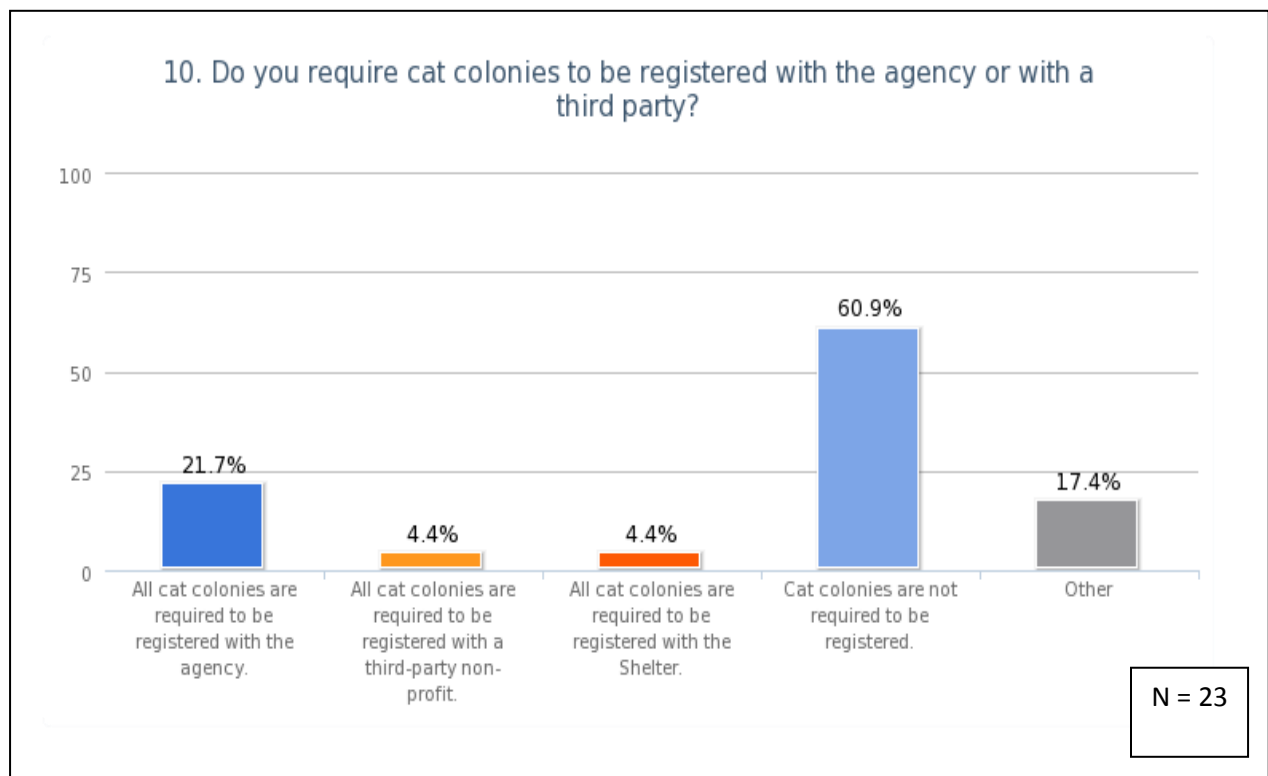
Research Question 8: Does your TNR program include feral cats only or feral and stray cats?

This question was asked to obtain a sense of the TNR landscape relative the cat populations



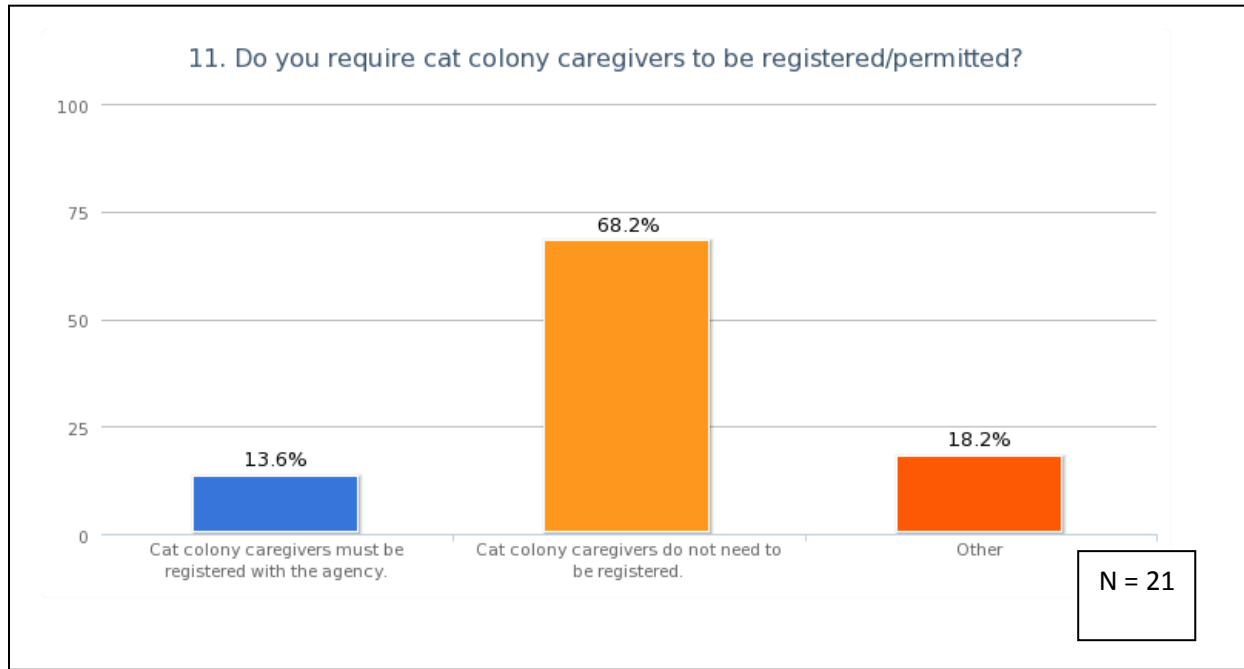
served. As shown in the literature review, TNR programs have traditionally centered on feral cat colonies; however in urban and suburban environments, more and more literature is emphasizing a “community cat” approach, where stray and feral cats are included. Results indicated 66.7% of TNR programs cover both, 9.5% are only for feral cats, 9.5% are only for stray cats and 14.3% fall into an “other category”.

Research Question 9: How long has the TNR program been in place (in years)? This question seeks to ensure the respondents represent a span of time that allows for measurable outcomes over time. Responses demonstrate this subgroup has a minimum of 1-2 years' experience with 38.1% reporting more than 6 years' experience. Research Question 10: Do you require cat



colonies to be registered with the agency or with a third party” and Research Question 11: Do you require cat colony caregivers to be registered/permitted?

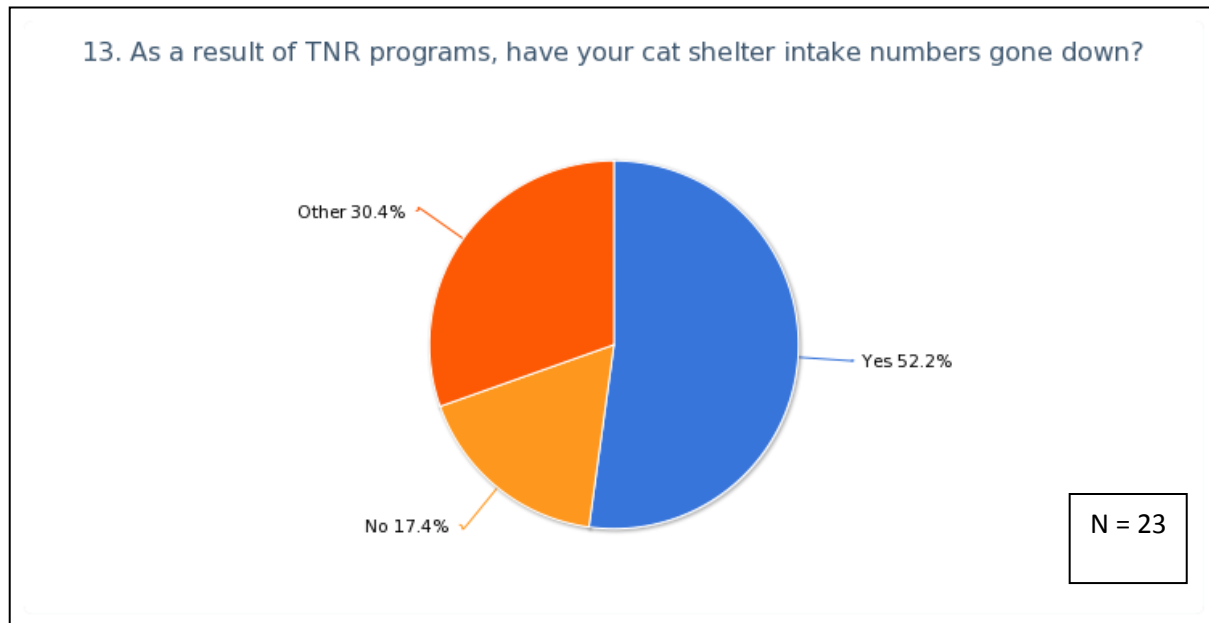
These questions are intended to compare the colony and colony caretaker management approaches utilized by the respondent agencies.

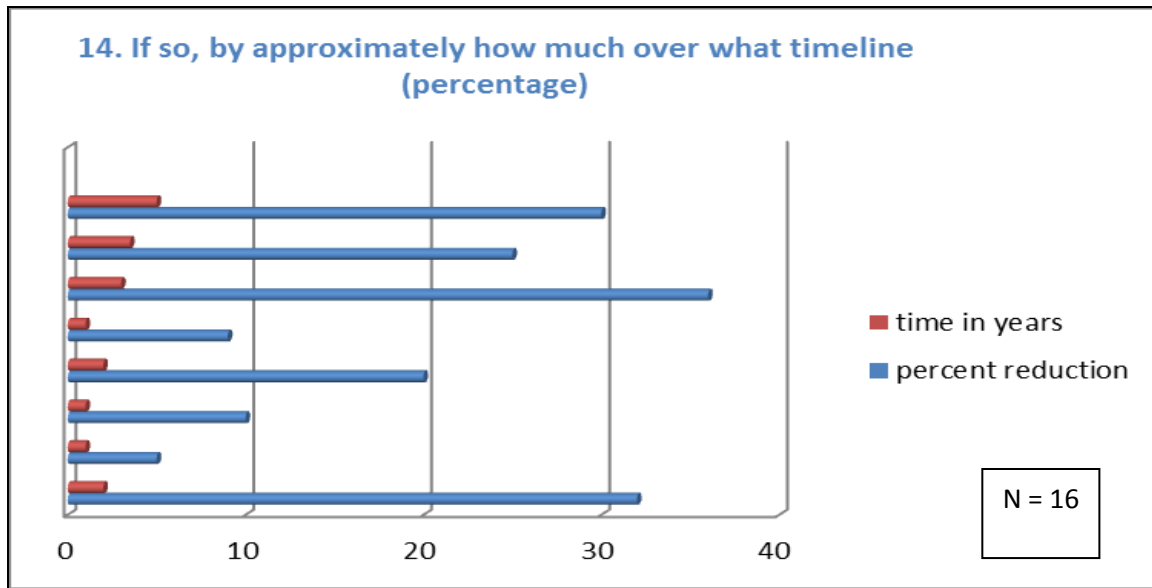


TNR Outcomes

Research Question 13: As a result of TNR programs, have your cat shelter intake numbers gone down?; Research Question 14: If so, by approximately how much (percentage) over what timeline?; Research Question 15: As a result of TNR programs, have your euthanasia numbers gone down?; and Research Question 16: If so, by approximately how much (percentage) over what time line?

The intent of questions 13 (n=23), 14 (n =16), 15 (n=17) and 16 (n=21) is to obtain outcomes data to compare against findings within the literature review, the three other surveys, key informant interviews and primary data supplied by the researcher. In the case of the listserv subgroup, responses suggest TNR has resulted in reduced cat intake numbers, although close to 30.4% of respondents indicated “other” and provided qualifying data in the details section, discussed below.

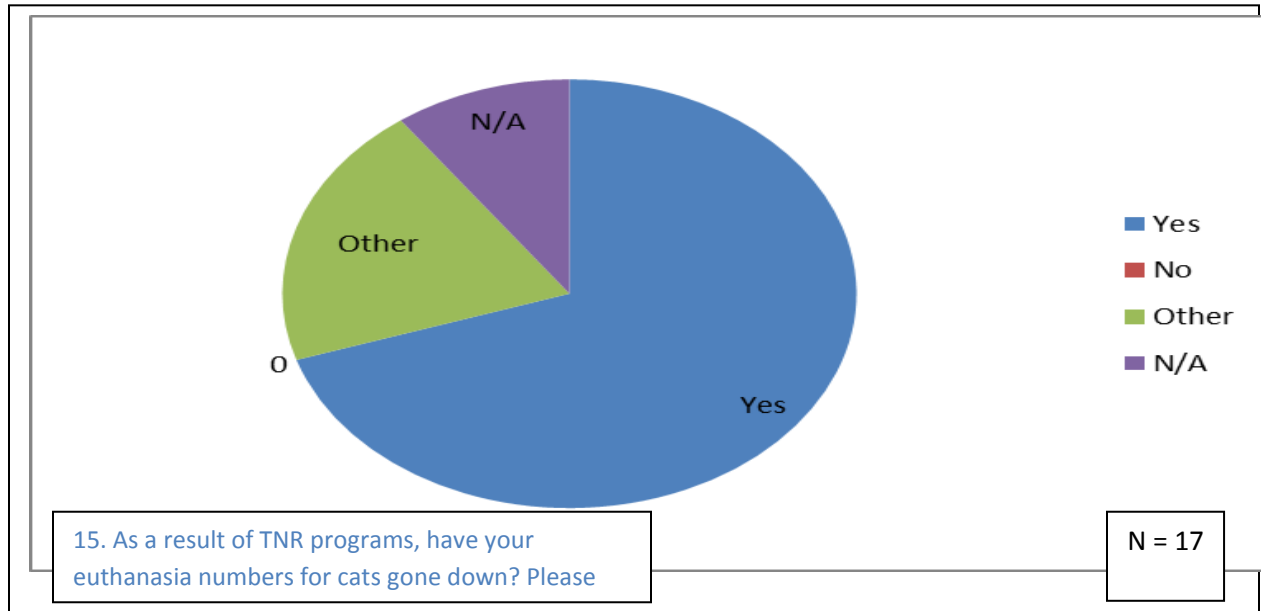




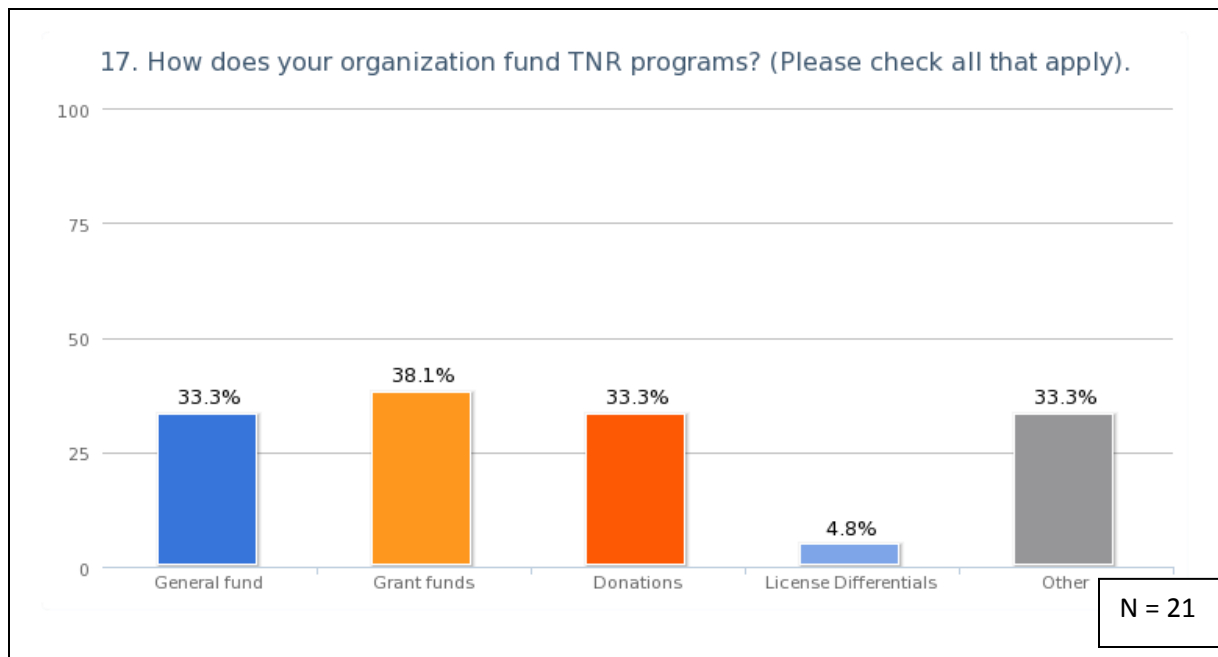
Responses to Questions 14, 15 and 16 demonstrate a significant impact toward intake and euthanasia reductions trends attributed to TNR. This supports assertions in much of the literature review and from the stakeholder interviews. It is important to note the existence of additional variables that also have contributed to reduced euthanasia numbers. Multiple respondents elaborated in the detail section noting that TNR is not the only contributing factor.

This is validated by input from several of the key informant interviews, as well as from participant observation. It appears in many cases that shelters with the most impressive euthanasia reduction numbers are also utilizing extensive social media, local media, fundraising and adoption events as well as enhanced foster networks and adoption incentives. Question 16 responses ranged from a variety of “unknown” or references back to details provided in response to Question 15. The salient findings include percentages ranging from 0% to 70% with the bulk of those reporting percentages (6 respondents) reporting reductions between 20-70%. Based on researcher review of the reporting agency detail notes, all are also incorporating additional mechanisms to reduce euthanasia. This is consistent with data from the literature review relative

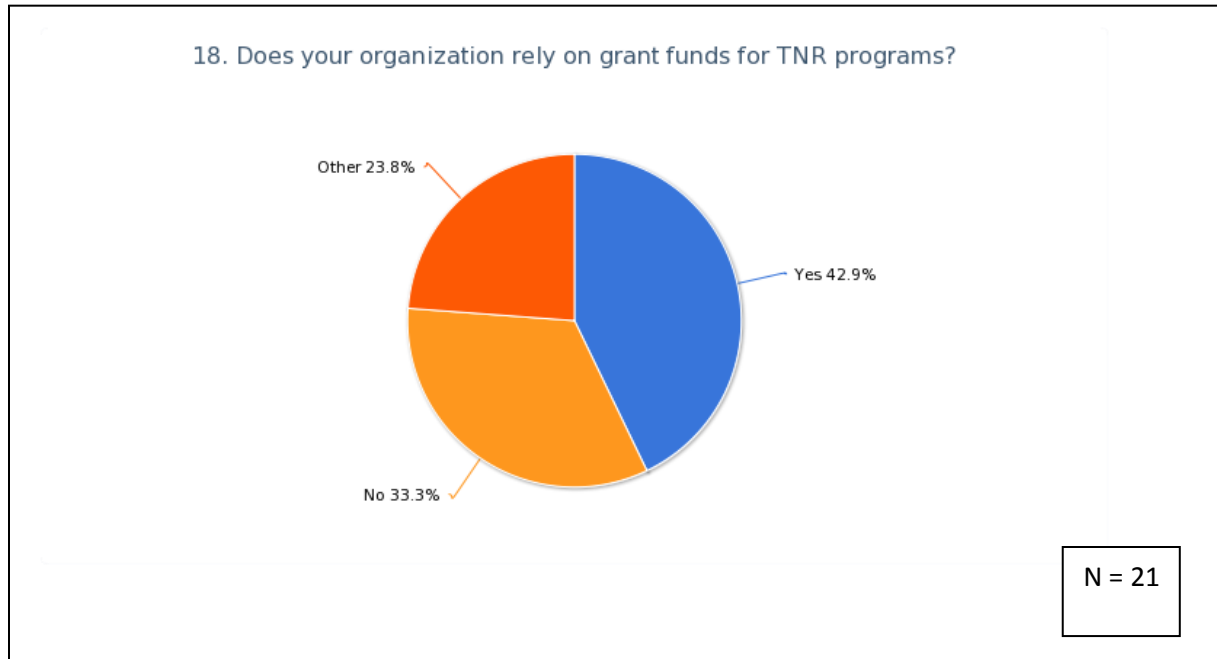
to best practices noting the importance of adoption for healthy, friendly strays, all kittens and removal of sick animals from the colony. Key informant interviews, particularly 1 -9 and participant observation field notes also support this finding.



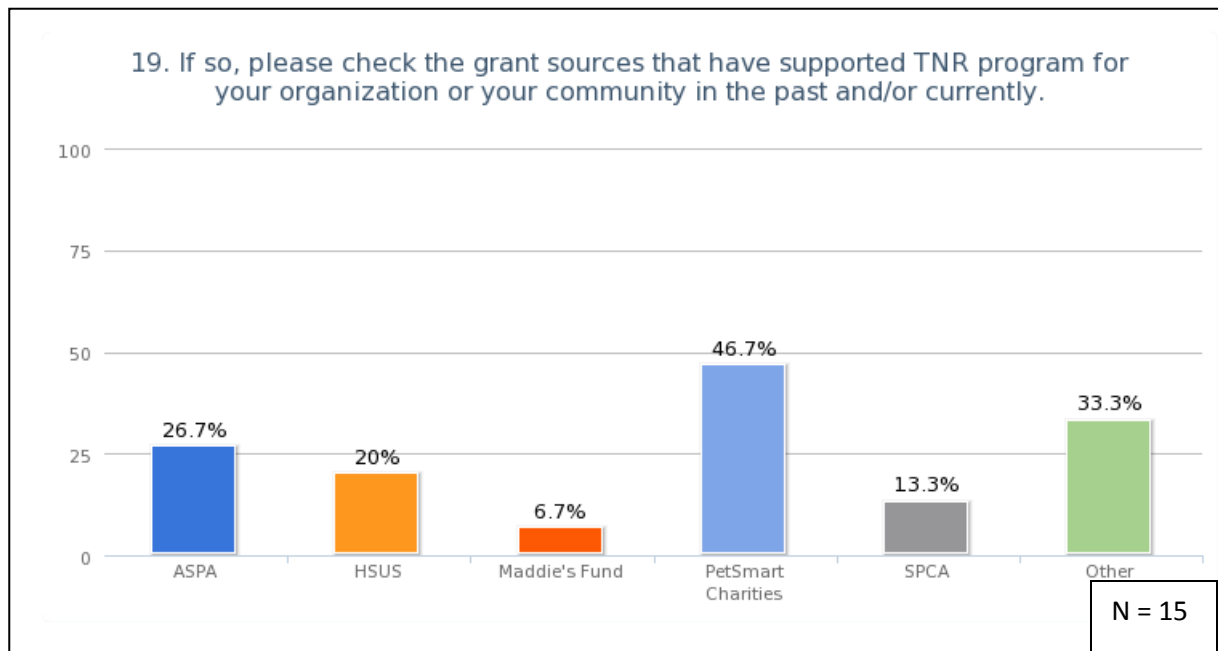
Research Questions 17-20 have to do with funding in general and grant funding specifically. Respondents answering *Research Question 17: How does your organization fund TNR programs?* indicated a variety of funding sources, with General Funds (33.3%), Grant Funds (38.1%) and Donations (33.3%) typically funding the bulk of respondents' TNR program costs. Reliance on grant funds was reported by 31.3% of organizations responding to *Research*



Question 18: Does your organization rely on grant funds for TNR programs. A slightly higher 33.3% of respondents said they do not rely on grant funds: however there was a fair amount of organizations reporting in the “other” category at 23.8%. A review of the “other” responses shows that several organizations with TNR programs in effect fund very little TNR if at all.



Research Question 19 asks respondents to indicate the “types of grant sources” used to support TNR programs. As shown in the chart below (n =15), PetSmart (46.7%), ASPA (26.7%)



and HSUS (20.0) provide the majority of TNR-related grant funding. Maddies Fund and SPCA are also cited as grant sources, although not as frequently. In the other category, all but one respondent indicated having no TNR funding or N/A. One respondent cited the non-profit Florida Animal Friends as a funding source, which supports low and no cost spay/neuter efforts throughout the state of Florida (<http://www.floridaanimalfriend.org>).

Research Question 20: If your organization currently relies completely or heavily on grant funds, how will TNR efforts be funded if grant funds are not available in the future? This is a critical question that most respondents cited as a concern. Individual responses are listed in the table below:

Org	Response to Question 20 (N= 13) How will TNR Effort be funded if grant funds not available in the future?
1	Donations
2	N/A
3	N/A – no program at this time
4	N/A we do not rely on grants , but like it when we receive them as it supplements our budget
5	None
6	See comments in item 18
7	We have in kind working relationship with local formal and informal advocacy groups to help with this program. These relationships have wild swings as leadership/focus of groups change
8	The current grant is a 2-year grant that is due to end in October 2014. Currently we are looking at other possible funding sources through other grant opportunities or through general funding
9	This is a huge issue. Some people like to claim that TNR is cheaper than trap and kill. Anyone who says this has not run a surgery program. It is always more expensive to do surgery than euthanasia. Our small grassroots program is mostly dependent on volunteers and it still costs us \$40 per cat. We only handled 3000 cats last year. We know we need to do a lot more to make a difference for the population, but we are limited by our available funds,. We are always doing local fundraising to supplement the grants, but we are not skilled in development.
10	They will have to take a back seat to owned/unaltered animals. We will not be able to be as aggressive as we were with grant funding.
11	N/A

N = 13

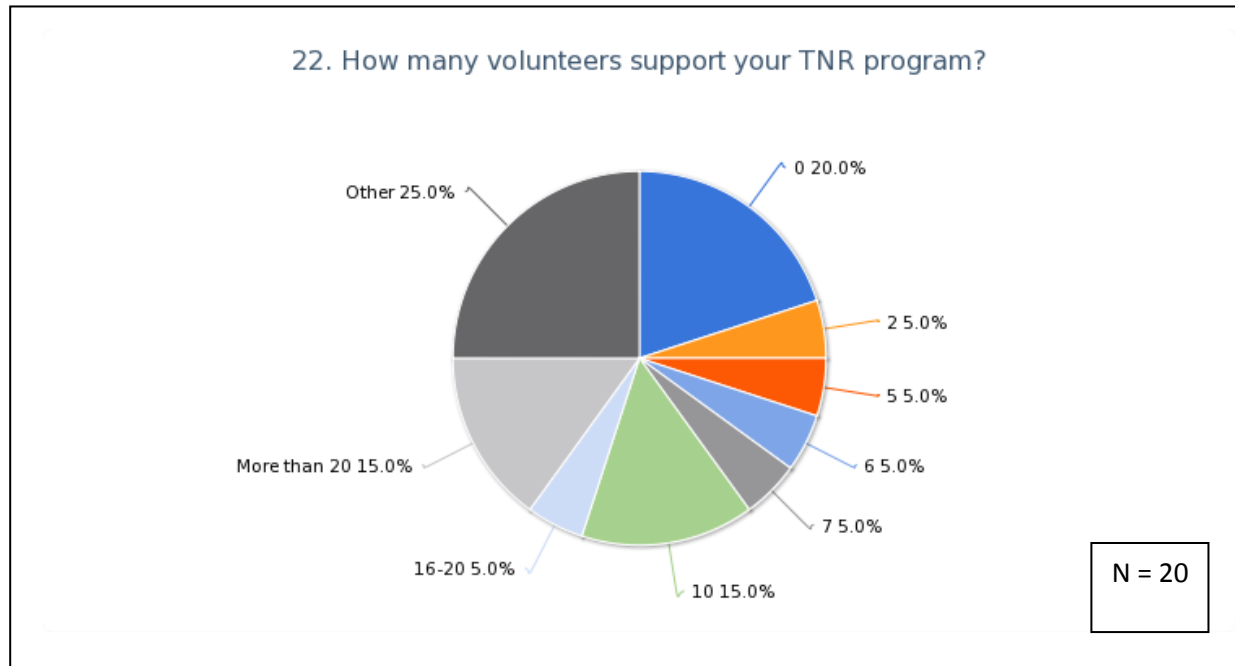
The issue of future funding was brought up in all of the stakeholder interviews. In one key informant jurisdiction, the organization had been able to achieve cost savings through a reduction in shelter and euthanasia costs. In this jurisdiction, the City provides the surgeries, ear-tipping and core vaccinations, but all other costs including trapping and transportation are borne by the volunteer groups doing the work in the field. In all interviews, grant funding was being utilized and was credited for the ability to provide consistent and targeted services.

The amount of grant funding being used to support TNR is significant and finding sources to continue funding will be a challenge for most, if not all organizations supporting TNR efforts. As noted in the response to *Question 20*, one organization (No. 9) points out that it is cheaper operationally to trap and kill than to do TNR. This is upheld within the literature review with the caveat that while trap and kill is cheaper, it is not acceptable for most of the public and more and more so, unacceptable for animal shelters and public administrators as upheld in the three (3) municipal animals services guides written by Handy, 2001; Aronson, 2010; and Rogers, 2009.

Staffing and Volunteers

Research Questions 21-26 have to do with staffing and volunteer resources. *Question 21 seeks Full Time Equivalent (FTE) staffing allocations used to operate TNR programs.* A review of the responses suggests the need for between 1- 3 FTE to operate TNR programs where staff is participating in the field components. Multiple respondents said they have zero to minimal in house staffing, relying on volunteers to do the field work. Of those reporting surgery work, between 2-4 surgical staff are working on a daily basis. *Question 22 asked about volunteer activity in general.* In response to Question 22 (n = 20), the average number of volunteers was

3.7 with most organizations reporting 0-6, two reporting 10 volunteers and one national non-



profit organization reporting a TNR volunteer force of over 300. Questions 23 -26 asked how many volunteers assisted with trapping, transportation, public education and other activities respectively. Responses to these questions mirrored responses to Question 22, with several noting the reliance on volunteers to provide the majority of these components.

Voucher Programs

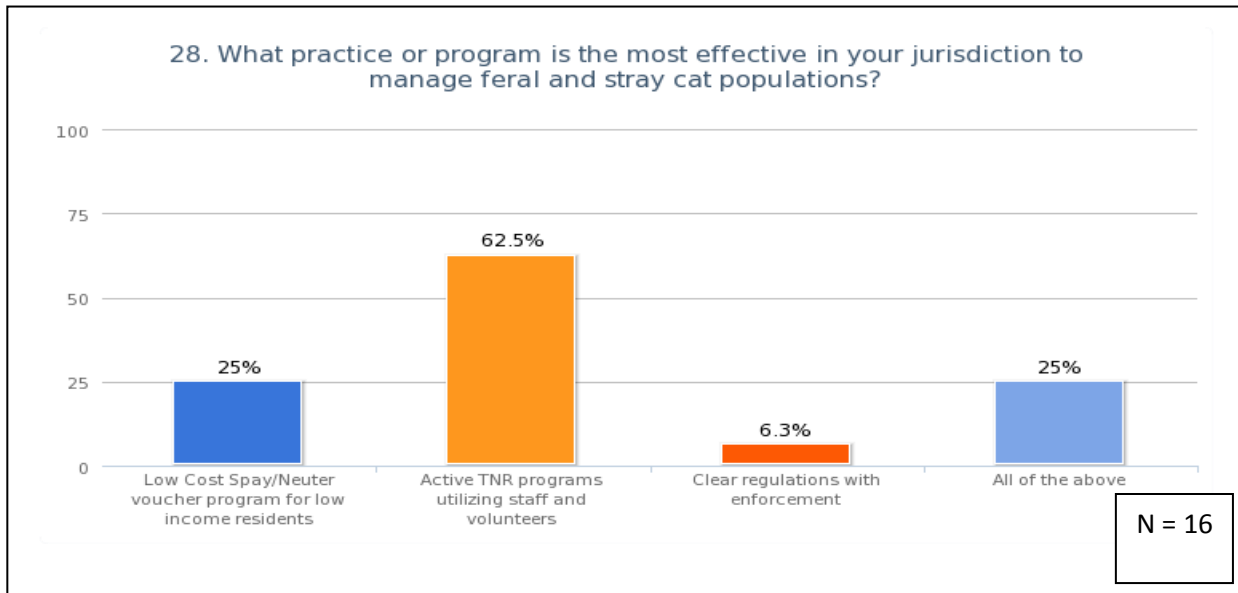
Question 27 was an open question related to low or no cost spay-neuter voucher programs. Respondents were asked if a third party voucher program is utilized and if so, what are some of the pros and cons of the program. Almost all respondents had some form of low or no cost voucher program in place, either handled by a third party or in-house. Issues to think about included the importance of transparency (1 respondent), the importance to provide the service for low income residents (2 respondents), which to the participant observer is implied in all organizations offering vouchers for low income residents. The literature review also

substantiates the need and value of voucher programs. Multiple respondents noted the voucher program is an important part of long term animal population control (n=3). One organization reported it provides up to five (5) free spay/neuter vouchers for its residents.

Challenges reported with voucher programs include increased cost of adoptions due to the shelter costs of doing the surgeries, challenges of finding veterinary partners to do the surgeries at reduced costs. The point was made by one respondent that the veterinarians participating in the voucher program essentially “take a loss”. This issue was also raised during key informant interviews, with several noting the importance of partnerships within the veterinary community. The literature review included much discussion about this importance as well. In the Sacramento region and in Citrus Heights specifically, SAAC has an estimated 15 veterinarians contracted to support the voucher programs. However, only six of those provide feral cat surgeries. Of those, two are located in Citrus Heights and one is just outside the City limits.

This is important because access to surgeries has been identified in all data groups as a critical part of TNR long-term success, especially for volunteers who may have time and transportation constraints. Other respondent comments regarding voucher programs related to the cost for TNR colonies, which even at reduced costs add up for the caregiver. The researcher heard similar input from some of the key informants, with some participants recommending spay/neuter should be free and another suggesting it be included as part of a lifetime license or registration. *Research Question 28: What practice or program is the most effective in your jurisdiction to manage feral and stray cat populations?* Responses to Question 28 (n = 16) indicate that a low cost spay/neuter program for low income residents and active TNR efforts are

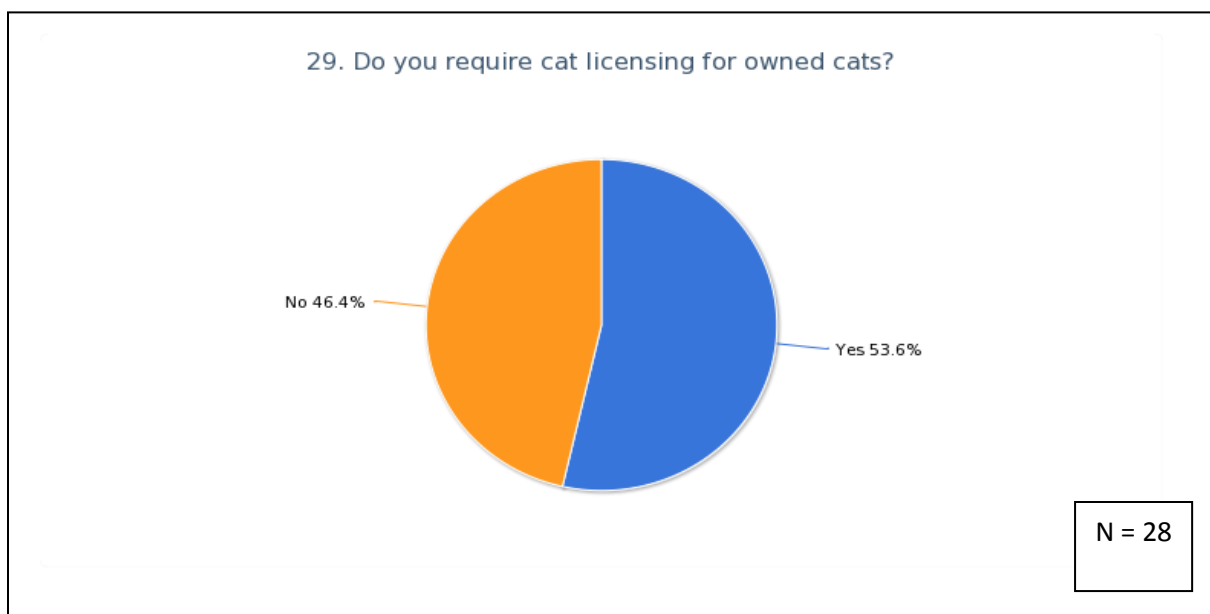
important for ongoing stray and feral cat management programs. Nearly 30% of respondents said



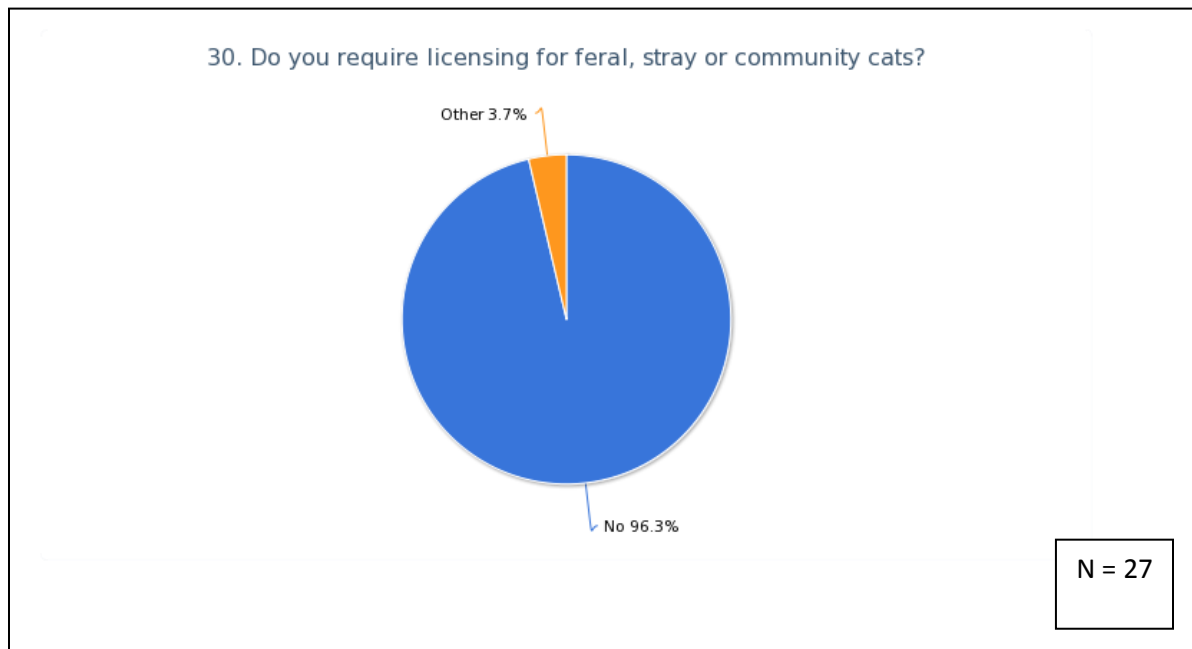
an effective program also needs clear regulations with enforcement.

Registration, Regulation and Enforcement

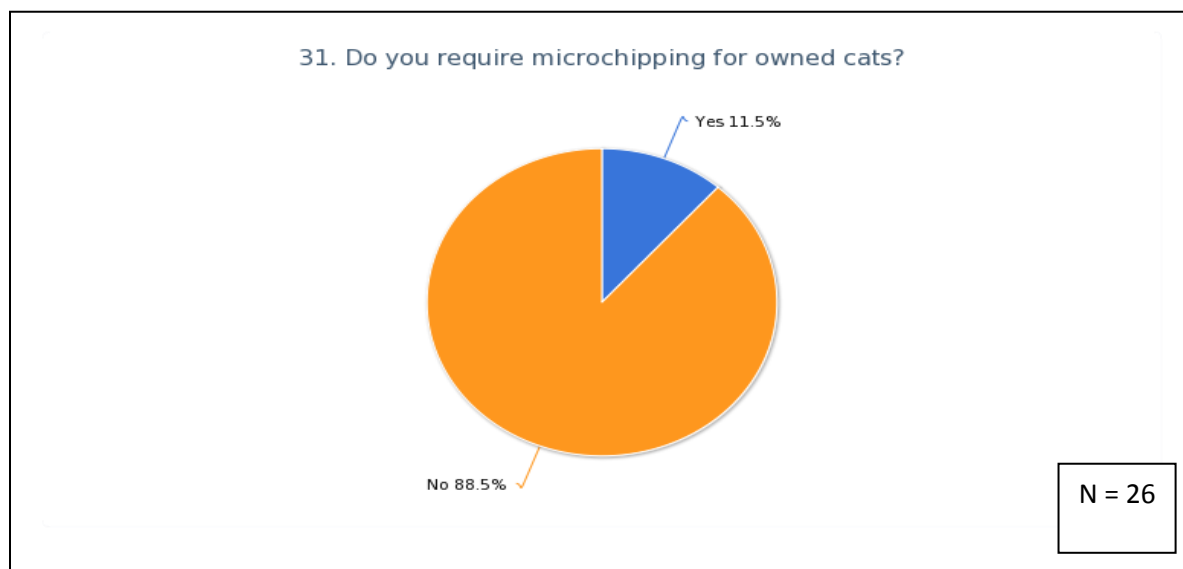
When asked in Research *Question 29 whether owned cats are required to be licensed*, the



response was closely split with 53.6% yes to 46.4% no (n=28) . Research Question 30 followed up with the question of whether stray, feral or community cats are required to be licensed. The majority of respondents (n =27) said they do not require stray or feral cats to be licensed in response to *Question 30* with only one respondent reporting in the “other” category, stating a program is being set up.

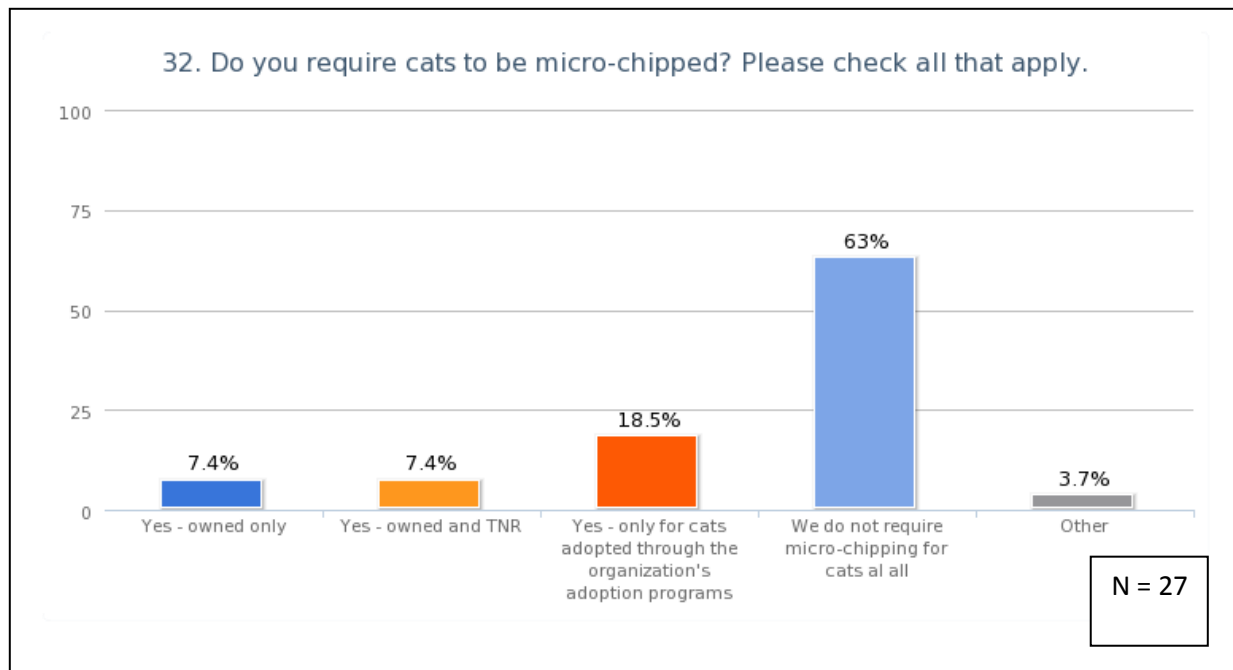


Question 31 asked about micro-chipping for cats. Of the 26 respondents, 88.5% reported no micro-chipping requirements. Only three organizations reported a requirement for micro-



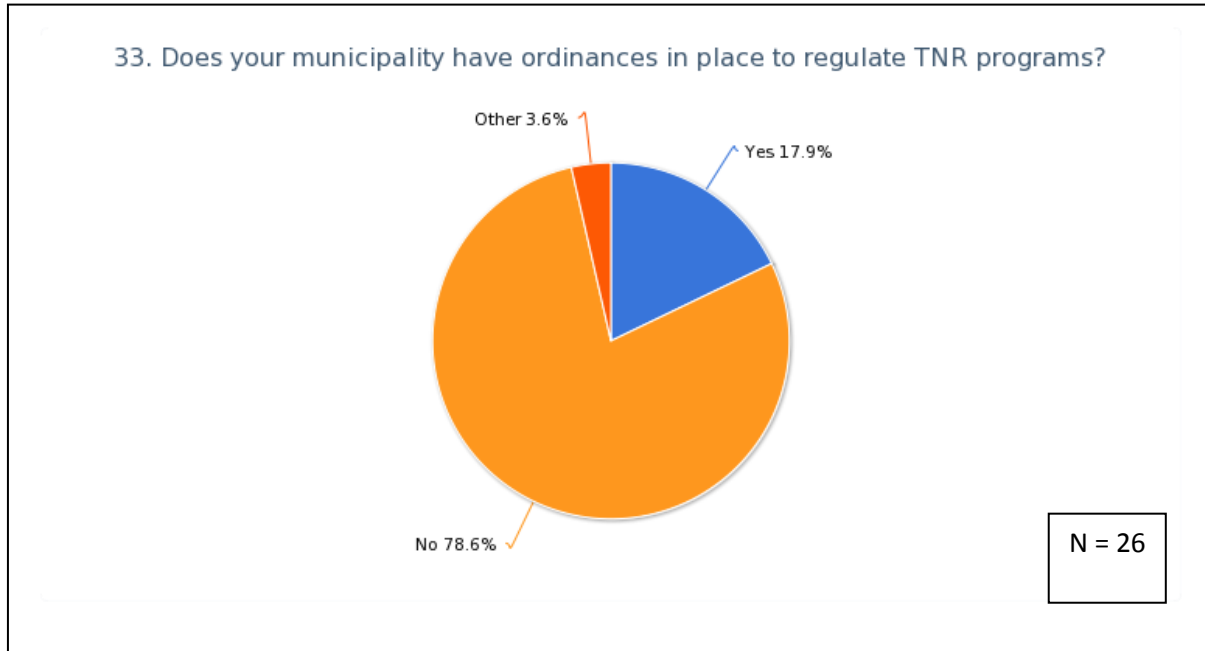
chipping in general and 5 organizations reported a requirement for all adopted cats to be micro-chipped.

This question was also asked in the key informant interviews, with similarly varied responses. For one key informant city, the requirement to micro-chip is based on a desire to have an effective tool to return cats to owners and to move beyond a common society sense of cats being “disposable”. From the participant observer perspective, a requirement to micro-chip would be particularly important to reunite cats with owners in neighborhoods and multi-family communities with high turnover rates. A follow up *Question 32 asked, “Do you require cats to be micro-chipped?”* The respondents were asked to select all that apply (n = 27). Since more



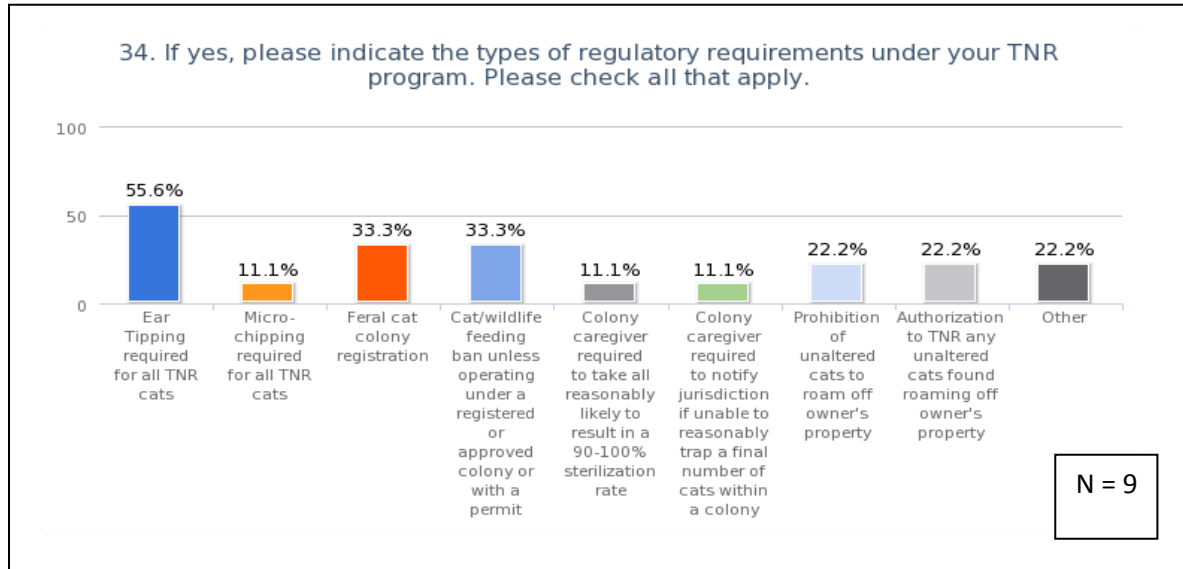
than one choice could be selected, this has a lower actual participant rate. The majority of respondents, 63%, indicated they have no micro-chipping requirements at all, followed by 18.5% who only include micro-chipping for animals adopted through adoption programs.

Research Questions 33-36 are related to regulation and enforcement. *Question 33 asks,*

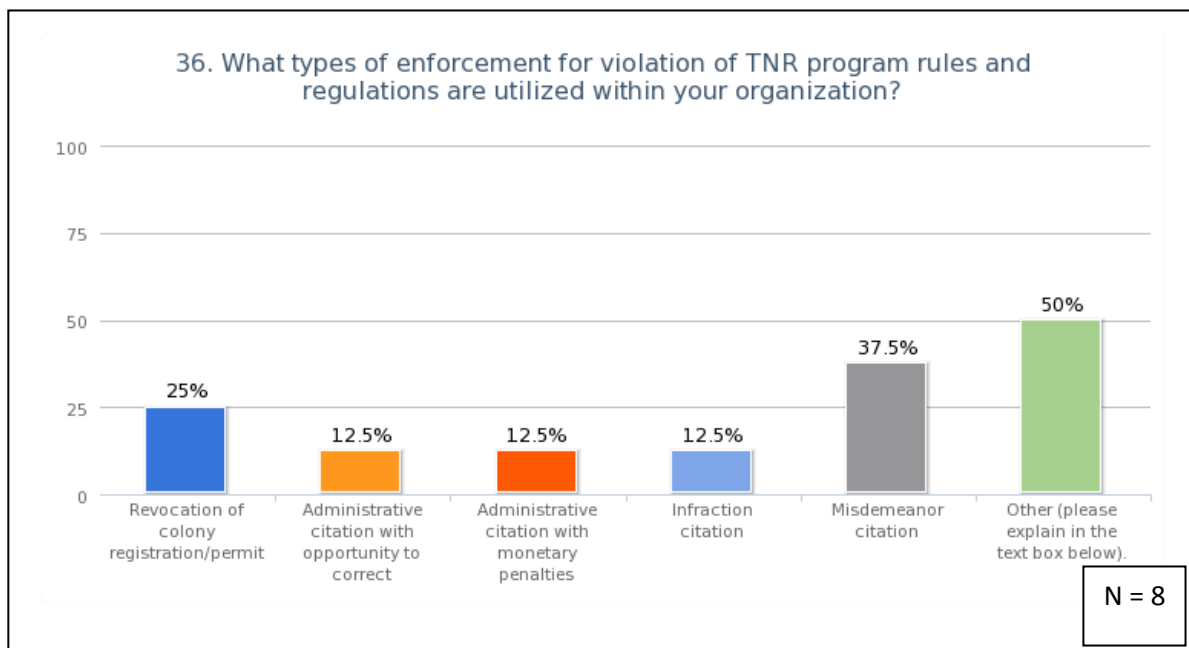


Does your municipality have ordinances in place to regulate TNR programs? Of the 26 responses, close to 80% do not have specific ordinances in place and nearly 20% do.

Question 34 seeks specific data about TNR regulations, asking respondents to select from a list of possible requirements. Interestingly, only 55.6% required ear-tipping, which is considered a universal standard for TNR according to best practices within the literature review and through key informant interviews. In two jurisdictions, any cat found at large was eligible for TNR. This regulation was in effect for one of the key informant cities, which was cited as an effective way to achieve sterilization and avoid issues related to cat ownership. Interestingly, neither city allowing TNR for at large cats requires the cats to be ear-tipped. This may be due to the fact that the majority of cats subject to this type of ordinance are owned and/or “stray” neighborhood cats.



Research Question 35 asks about enforcement and Question 36 asks about penalties for violations. Respondents to Question 35 (n=8) who indicated having enforcement authority (6 entities) noted some degree of enforcement is utilized, but only one (a non-profit, not responsible for enforcement) said the enforcement was strictly applied. In the follow up question 36 (n=8), respondents were asked to select the types of enforcement applied in TNR program violations. Responses to this question leaned heavily toward citations, either administrative or infraction/misdemeanor.

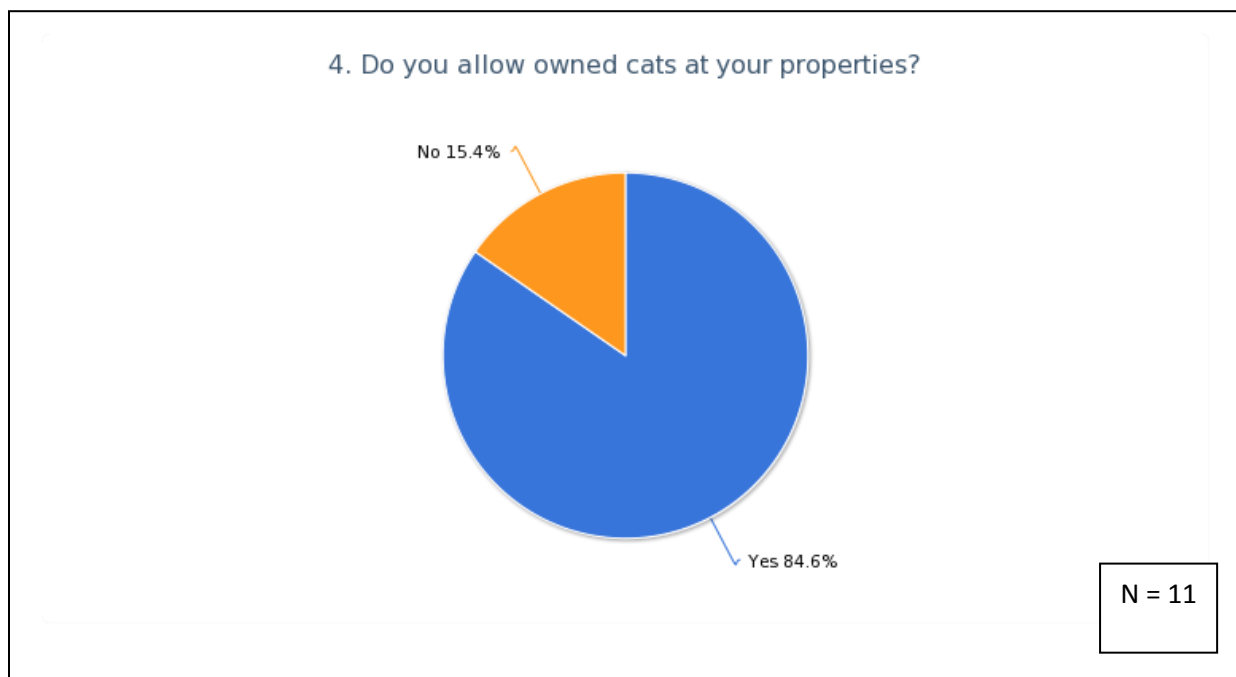


Survey Subgroup 4 – Rental Property Management Data

A 36-Question survey was emailed to 58 multifamily communities in Citrus Heights. Thirteen (13) property managers responded, at a 22% response rate. Seven (7) email addresses came back with errors preventing delivery. The researcher intended to follow up by phone with the other 46 locations, but time constraints prohibited doing so. Outreach through apartment manager association is highly recommended by Lawrence (2012) as a best practice; the New Jersey project also identified apartments as a priority target.

The data collected from the survey is analyzed comparatively with data from a general apartment information survey conducted August – November 2012 (published in January 2013) as well as key informant data and participant observer data.

Key data findings from the survey are discussed below.



Research Question 4: Do you allow owned cats at your properties? Respondents (n=11)

reported that owned cats are permitted; two said owned cats are not allowed. This is consistent with to the 2013 City Apartment Survey, which indicates 77% of the apartment complexes in Citrus Heights allow pets. The other 13% of complexes included in the Apartment Survey do not say whether pets of any kind are allowed. The 2013 Apartment Survey results show 2 complexes that state they only allow cats as pets and 3 others have pet weight limits of 10 lbs or less.

Of the Rental Property Management Survey respondents, 100% of survey participants (n=13) indicated they have a pet policy in response to Question 5. This is also consistent with the Apartment Survey which appears to have more restrictions in place to address dogs versus cats, such as weight limits and breed bans. Respondents to Question 6 of the survey 100% (n=13) said the pet policy applied to both dogs and cats. These 13 participants also affirmed their pet policies

8. If so, what is the monthly amount? (n=9)

\$500 for 1 and \$750 for 2

\$15 per pet

\$300 pet deposit

\$0

\$20

not monthly, one-time fee

\$0

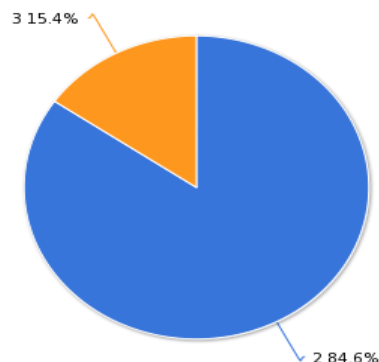
\$500

\$10/month per pet

N = 9

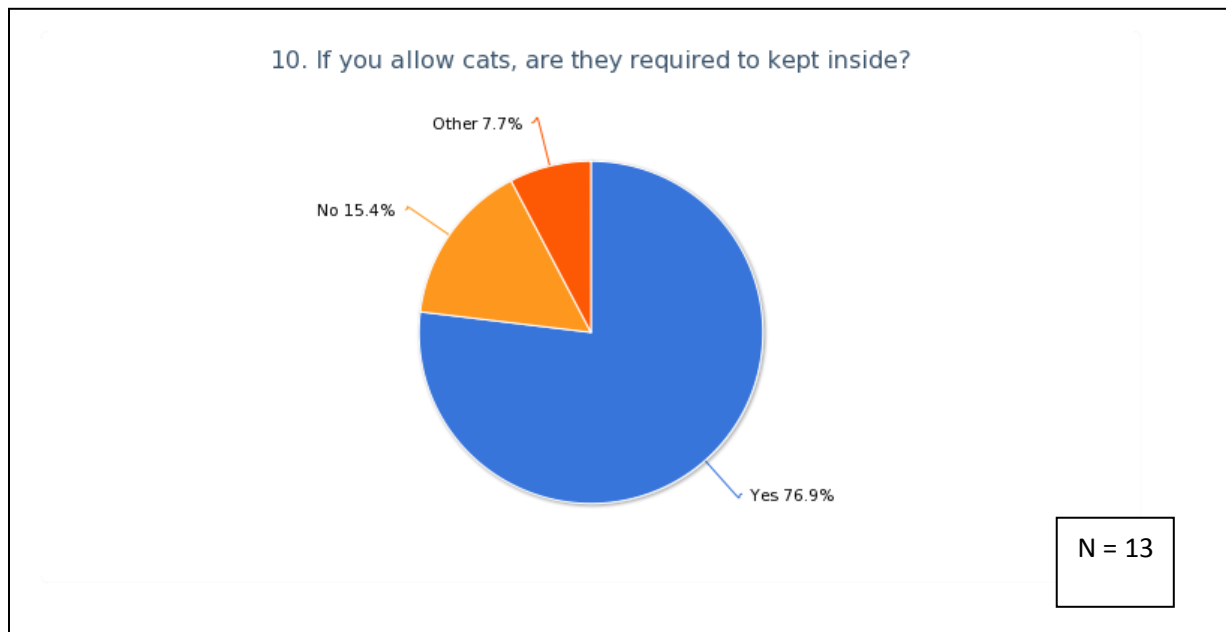
required pet deposits for cats in their response to Question 7. Participants in the Rental Property

9. If cats are allowed, how many are allowed per unit?



N = 13

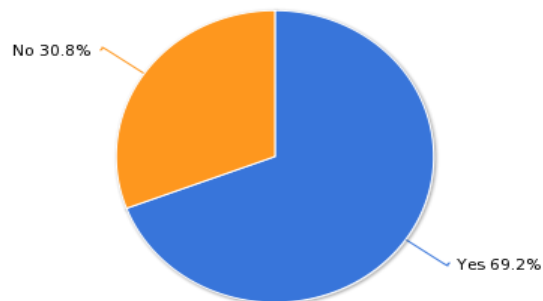
Manager survey had a higher rate of pet deposits than demonstrated in the 2013 Apartment Survey, in which only 22% of those reporting pets are allowed required deposits. This suggests that those responding to the Subgroup 4 Survey may have been motivated to respond based on experience with pet nuisance issues. Pet deposit amounts ranged from one-time deposits of \$300 - \$500 per pet. This is consistent with deposit amounts reported in the Apartment Survey, which ranged from \$300 to \$600, with some properties also including an increased monthly rent. Rental Property Management Survey participants reflected similar monthly rental rates when in place. The total amount of cats allowed per unit was asked in Question 9. Over 80% reported a limit of 2 cats per unit; 20% allowed 3 cats per unit (n=13). The Apartment Survey reports similar findings, with 11 properties limiting to 2 pets and two properties limiting tenants to one pet per unit. Rental Property Management Survey Question 10 asked participants if cats were required to be kept inside, with 76.9% reporting affirmatively (n=13). If this is found to be



consistent throughout the rest of the multi-family properties within the City, it would suggest that the bulk of issues with cats on multi-family properties are associated with stray and feral cats versus owned cats.

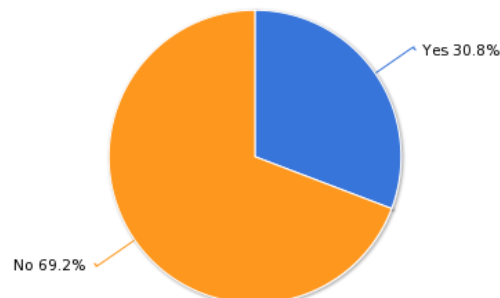
Questions 11 -15 related to the leasing process and how proof of pet license, vaccinations and spay/neuter proof are included. Responses indicate a growing trend to require proof of licensing at initial lease period, but the trend is not as robust for renewals. Taking into consideration the likely bias toward cat issues with this respondent group, it is probable that

13. 13. If a pet policy is utilized, are tenants required to show proof of rabies vaccination as part of the leasing process?



N = 13

14. 13. If a pet policy is utilized, are tenants required to show proof of spay/neuter as part of the leasing process?



N = 13

the majority of rental property managers are minimally attuned to whether or not cats are licensed, vaccinated and altered.

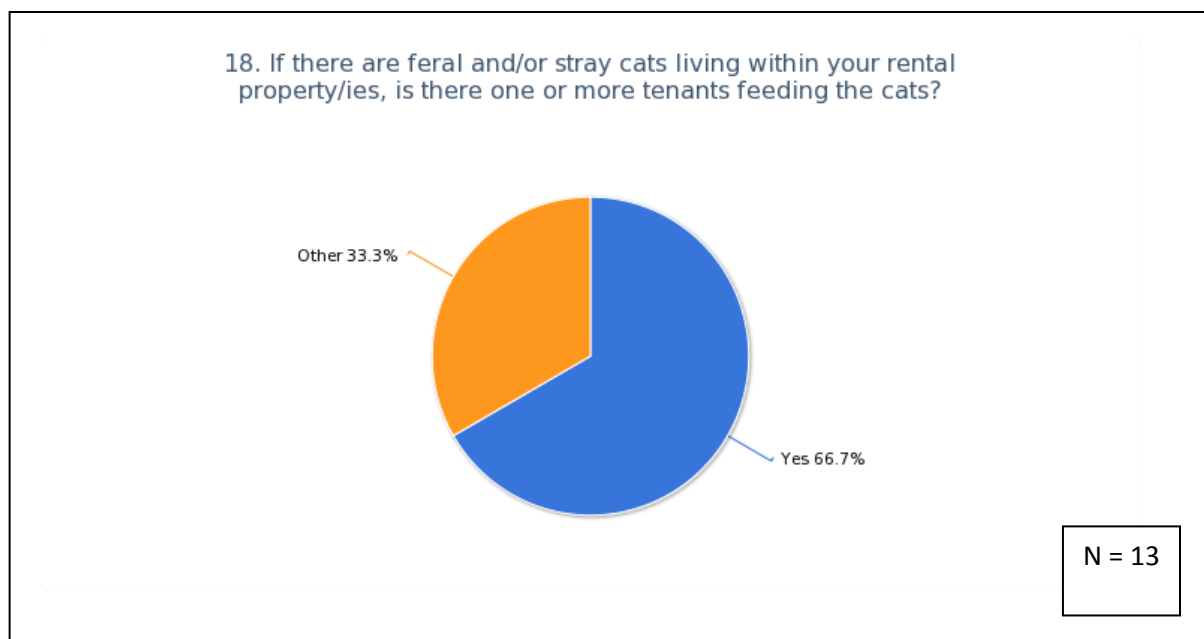
Question 16, Do you have feral and or stray cats on your rental property/ies? Resulted in 92.3% of respondents (n= 12) indicating Yes and one (7.7%) indicating No. Question 17, What is the estimated number of feral and /or stray cats at your properties? elicited responses ranging from 6 to 35 stray or feral cats on respondents' properties (n=12). Even with the probable bias toward properties with cat issues participating in the survey, the added data sources of City complaint data (participant observer review) and key informant interviews supports the finding that it is likely there is some degree of feral or stray cat issues at nearly every multi-family property, whether or not it is a priority issue for the complex managers.

17. What is the number of feral and/or stray cats at your property/ies?

- 2 respondents reported 15 cats
- 1 respondent reported 10+ cats
- 1 respondent reported 20+ cats
- 1 respondent reported 10-15 cats
- 1 respondent reported 13 cats
- 1 respondent reported about 35 cats
- 1 respondent reported the number varies
- 1 respondent reported 20-30 cats
- 1 respondent reported 6 cats
- 1 respondent reported 7 cats
- 1 respondent reported 10-20 cats
- 1 respondent reported 10-20 cats

N = 13

Questions 18-29 relate to the interaction between cat feeders and the complex. Sixty-six percent

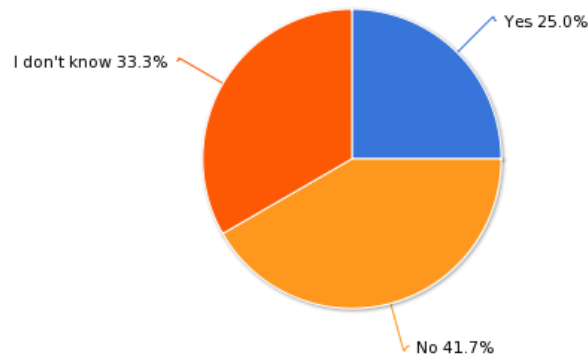


of survey respondents (n=13) affirm tenant feeding of stray/feral cats. Respondents also reported the cats are mostly not altered (50%) or they don't know (33.3%) in answer to *Question 19* (n=13). This is meaningful to the researcher, as it indicates there likely are few active TNR effort ongoing at most Citrus Heights apartment complexes. it . Several respondents (n=12) indicated nuisance wildlife issues associated with stray/feral cat feeding in response to *Question 20*. Wildlife nuisance issues are one of the most common complaints made to the City's animal services division related to stray and feral cat feeding. Very few (2) respondents (n=12) report having approved of the tenant feeding feral or stray cats in response to *Question 21*.

This is likely the case throughout the rest of the City's multi-family communities. Question 22

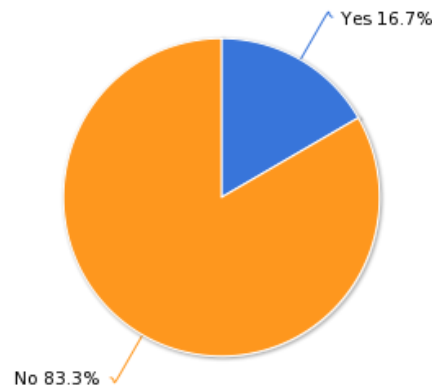
(n=12) asked if the feral cats on the property are spayed or neutered. Nearly 50% responded that

20. If there are tenants feeding feral and/or stray cats on your rental property/ies, are they feeding responsibly (feeding in the morning and removing cat food after feeding to avoid nuisance issues such as skunks and other wildlife).



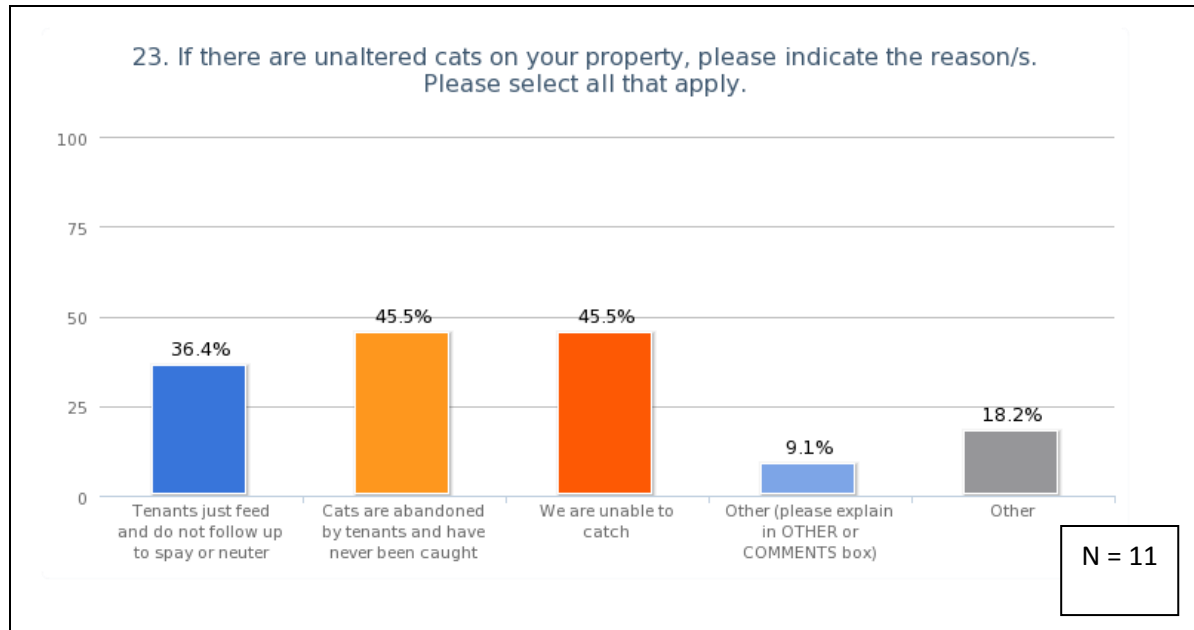
N = 12

21. If you have one or more feeders, do they feed and provide care for the cats with your approval? Please provide additional comments in the comment box if desired.



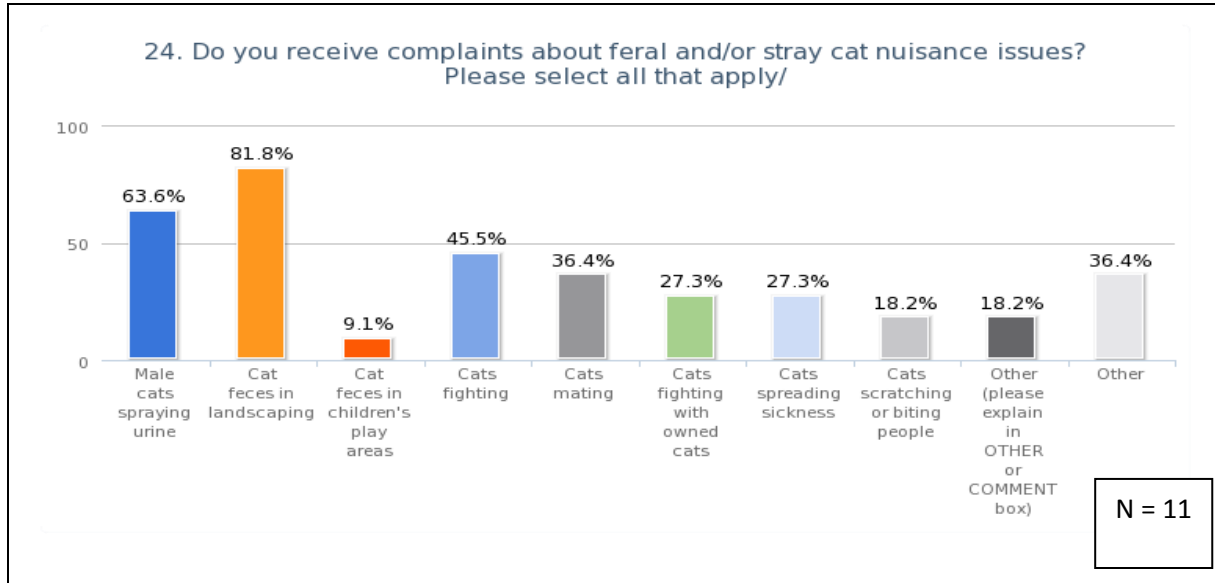
N = 12

at least some cats are altered. This is informative as it suggests a willingness, or at least an acceptance toward TNR for stray and feral cats in multifamily communities.

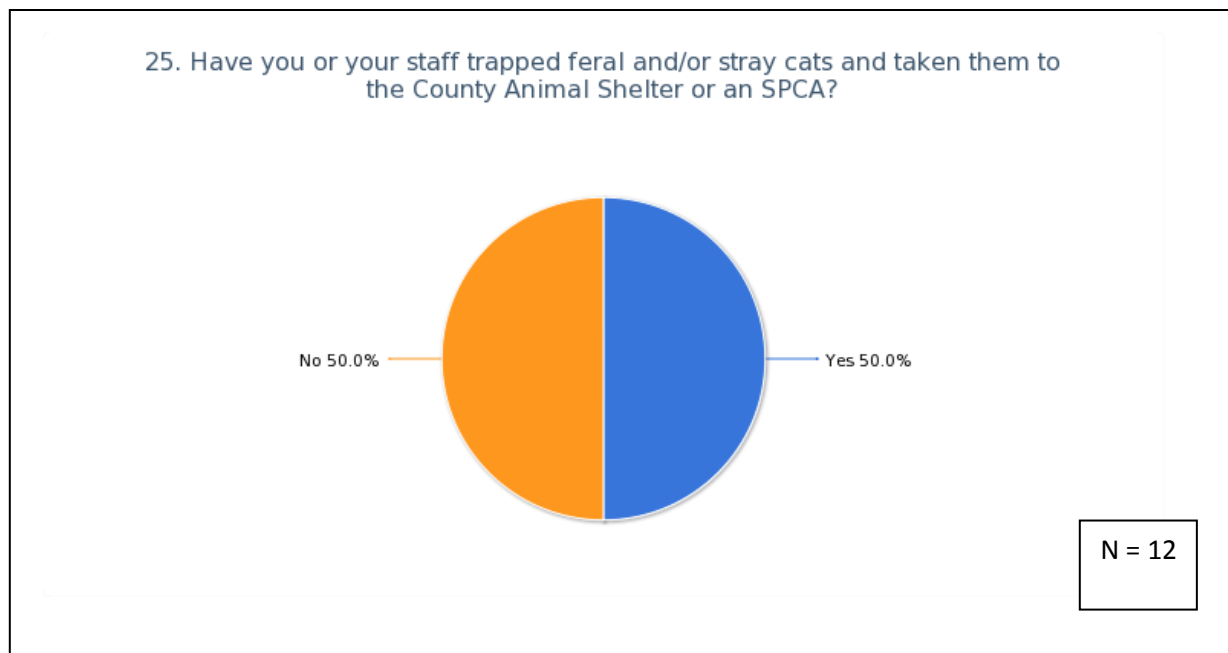


The main reasons cats are not altered cited in response to *Question 23* (n=11) included: no follow up by the feeder; cats are just abandoned; and the cats have not been caught. These reasons are similar to those heard by animal services staff, including the researcher. Responses are also consistent with key informant data, particularly from Key Informants 7, 8, 9, 11 and 13.

Nuisance issues reported by the respondents in answer to *Question 24* (n=11) center around male cats spraying, feces in landscape areas, but also include fighting with each other, with owned cats and spreading disease to cats biting or scratching people. Car damage, cat food being left near dumpsters and cats sleeping on peoples' cars are also identified as nuisance issues. Feces in landscaping (81.8%) and male cat urine spraying (63.6%) accounted for the top two nuisance issues. This aligns with participant observer data field notes. The researcher did not include the option of wildlife nuisance issues in the response range for this question. Based on participant observer field notes, citizen complaints and literature review information, however, the issue of wildlife nuisance is important to take into consideration, particularly associated with skunks. When asked whether respondents had taken cats to the SPCA or County shelter in

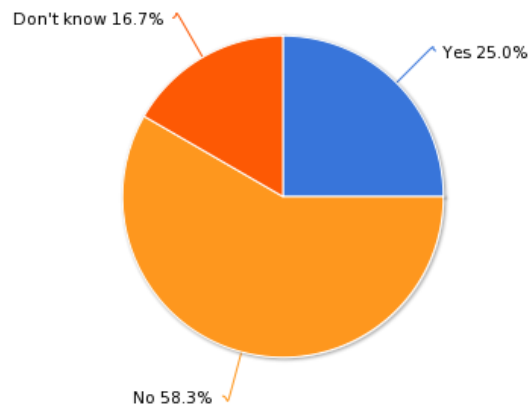


Question 25 (n=12), half of the property managers had done so. Question 26 asked if City Animal Services had been utilized to pick up cats for a \$20 per cat pick up fee. Responses to these two questions suggest that in at least 50% of the properties, stray and/or feral cat issues prompt



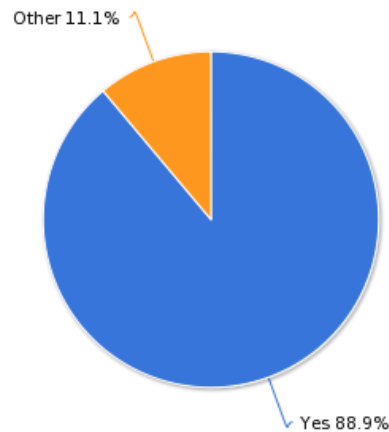
removal by the management. Some respondents may have removed the cats themselves and also may have had the City pick up cats. The survey questions did not specify whether respondents had done both take to a shelter and have the City pick up for a fee. It is possible some properties

26. Have you or your staff utilized the City's animal control staff to pick up trapped cats and take to the Animal Shelter for a \$20 per cat pick up fee?



N = 12

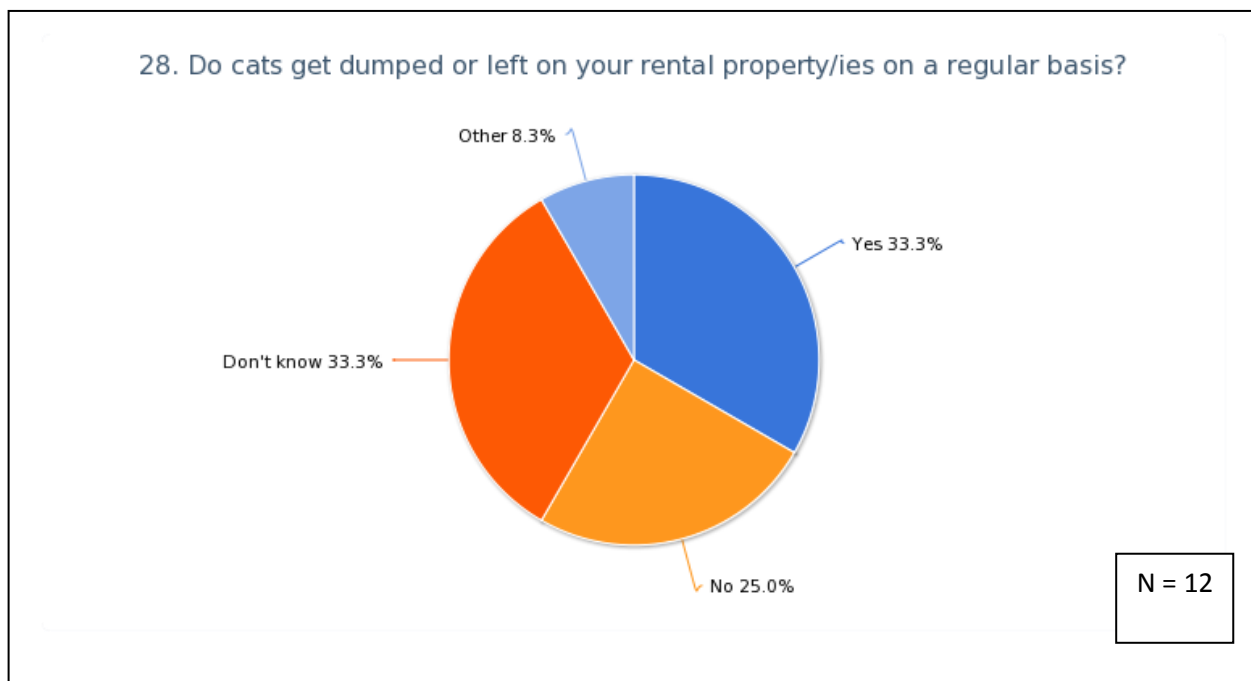
27. Have you utilized the Sacramento Area Animal Coalition (SAAC) voucher program for feral cats? If NO, please skip to Question 30.



N = 5

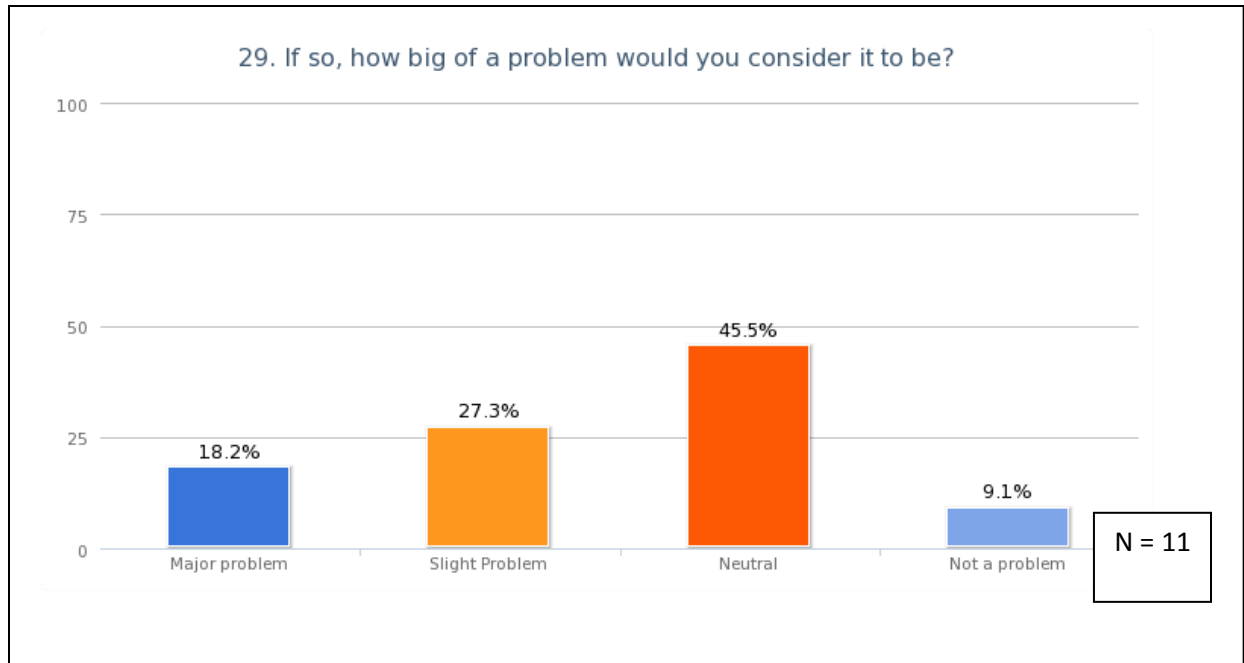
have done both.

Question 27 (n=5) sought input on the number of cats going to the shelter from multifamily property origins. In Question 28 (n=12), the researcher was looking for property manager perceptions about cats abandoned or dumped on the subject property/ies. Question 29 (n=11) asked respondents to rate their assessment the problem of abandoned or dumped cats. Responses suggest minimal interest in cats in general as a major problem. This seems consistent based on the lack of response to the overall survey and the fact that there is the ability for cats to

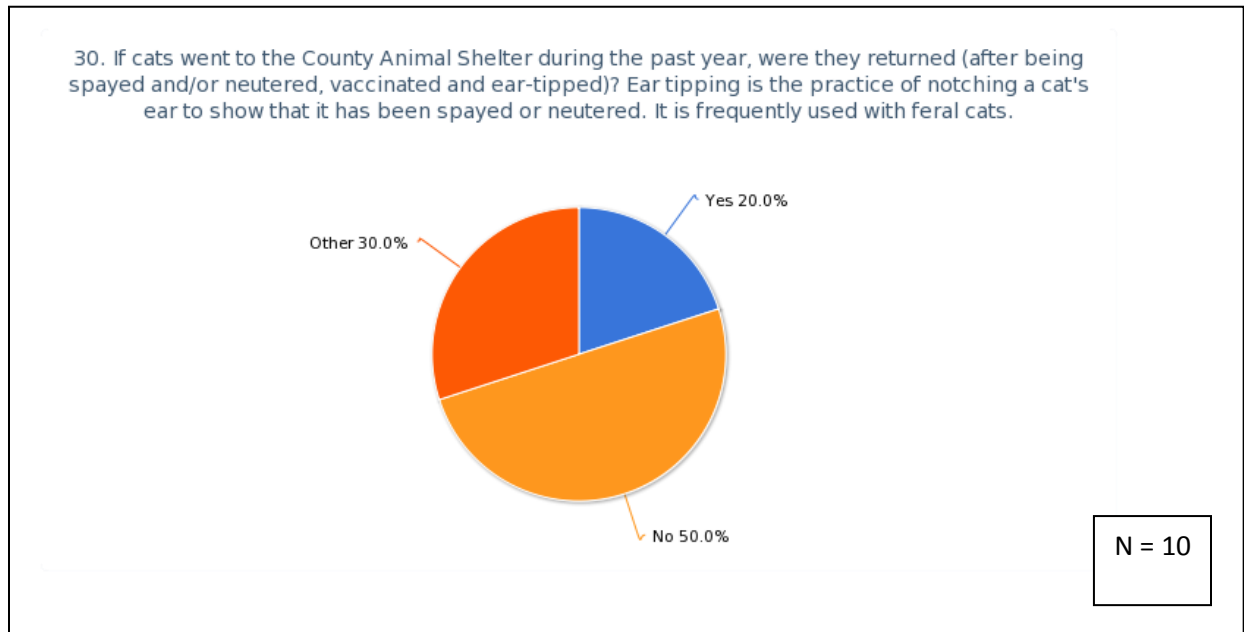


be taken to the shelter at no or low cost. A variable that might trigger a change in the problem priority level for others is the community cat program which returns cats to the general area they came from as a rule. Because the local “return to field” movement is still fairly new, there may be more interest from multi-family properties as more cats are returned. It is important to note that of the 5 property managers who did respond that cats are problematic, three (3) had taken

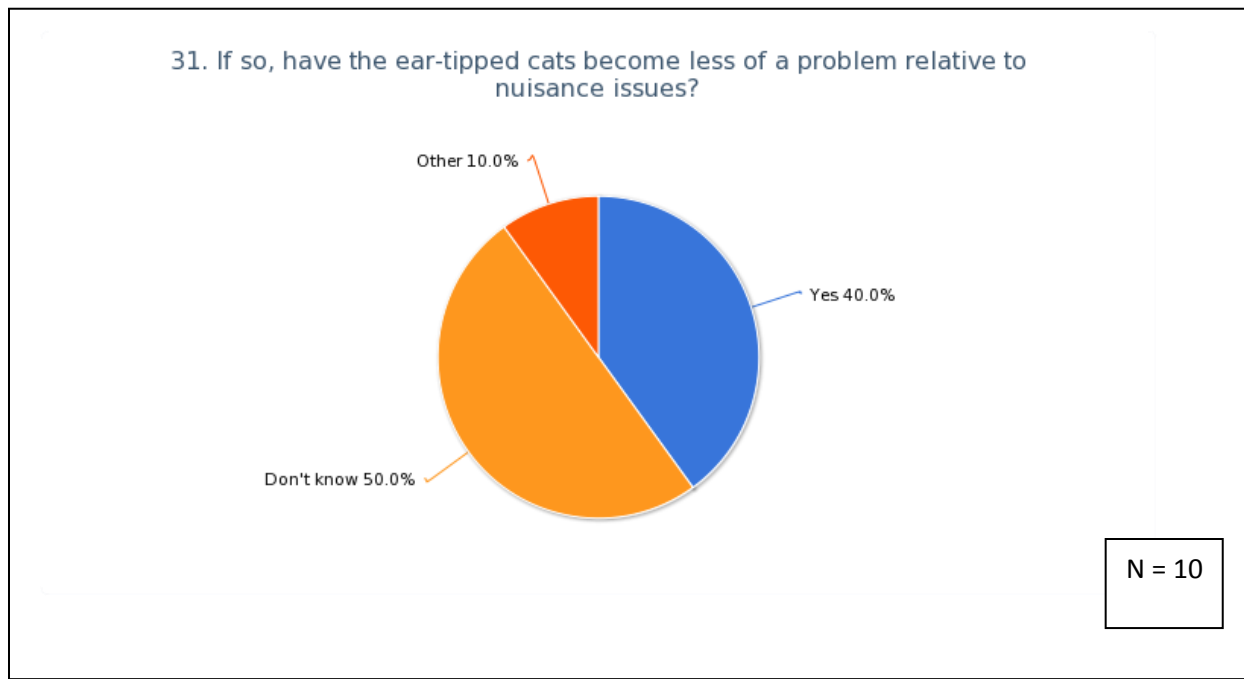
more than ten (10) cats to the shelter in the past year and between the, they account for 45-65 cats that went to the shelter in one year.



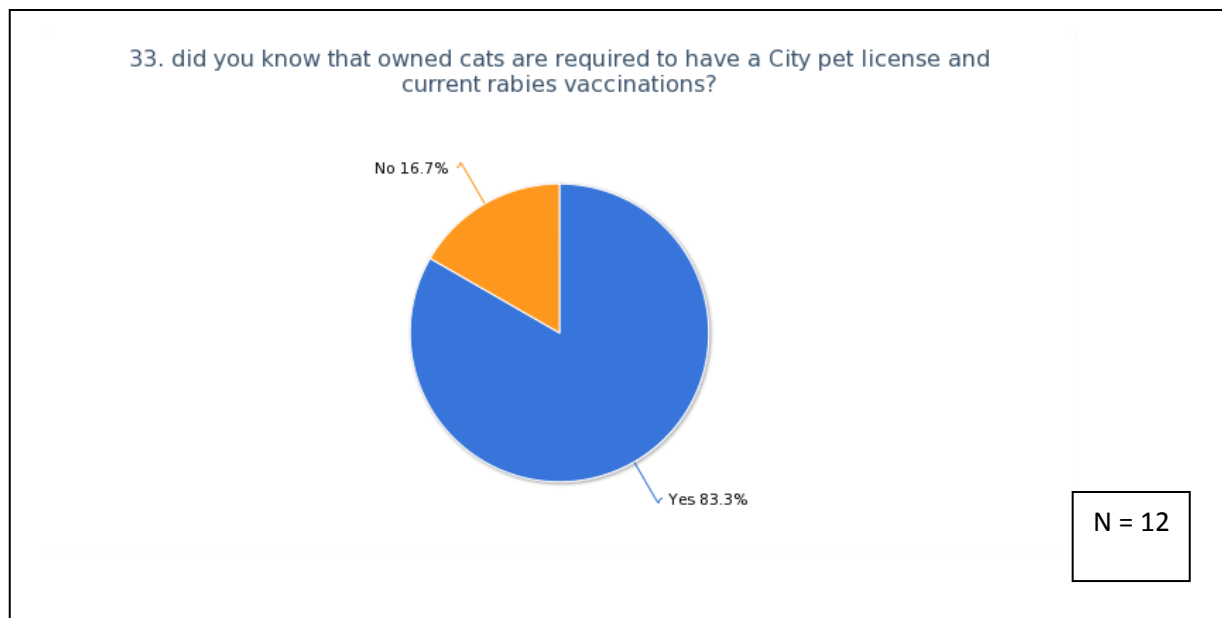
From the City's perspective, if the contract fee structure is based on per animal cost, at an estimated \$200 per animal, these five (5) properties alone could result in between \$9,000 and \$12,000 cost to the City.



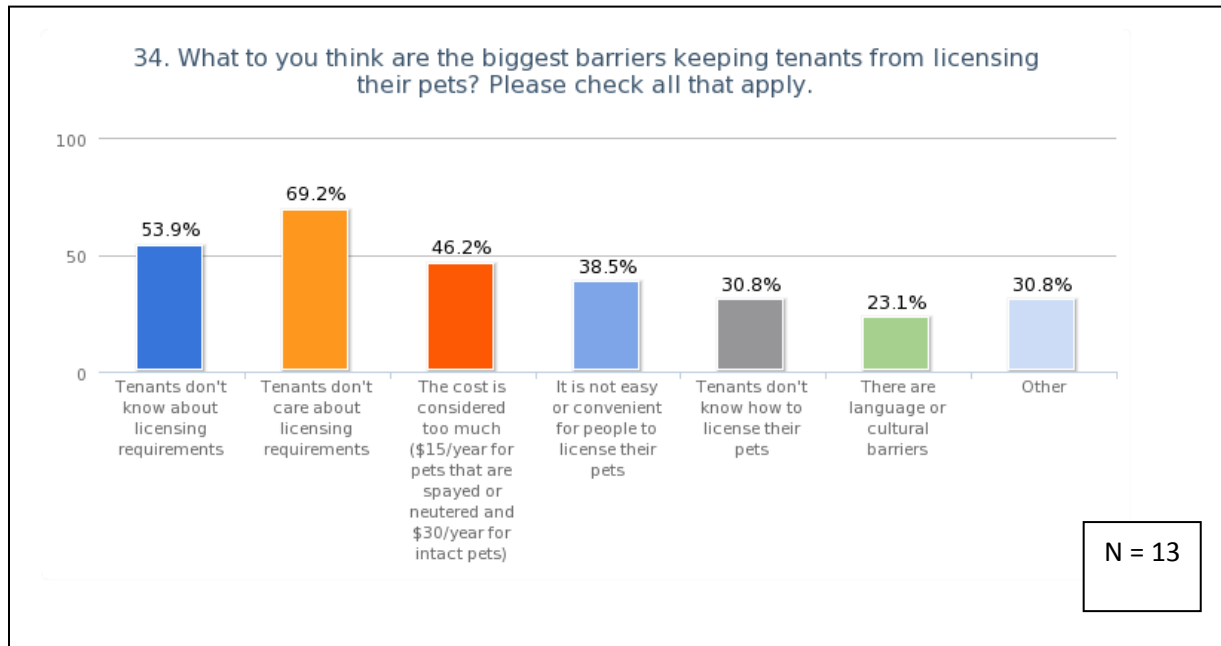
Question 30 assessed respondents' awareness of the community cat program, asking whether cats that went to the shelter came back to the complex after being altered, vaccinated and ear-tipped. This is important because there are differing recommendations from the literature review and even within the various key informant groups regarding notification about the "community cat" or "return to field" program. Based on participant observer field notes and key informant data, it is highly likely cats have been returned to respondent properties through some type of TNR effort that included an ear-tipping for identification. In a review of responses to Question 31, none of the respondents (n=10) indicated worsening issues when ear-tipped cats were returned to their properties and four (4) respondents indicated nuisance issues were reduced; the other five (5) said they didn't know if nuisance issues were reduced.



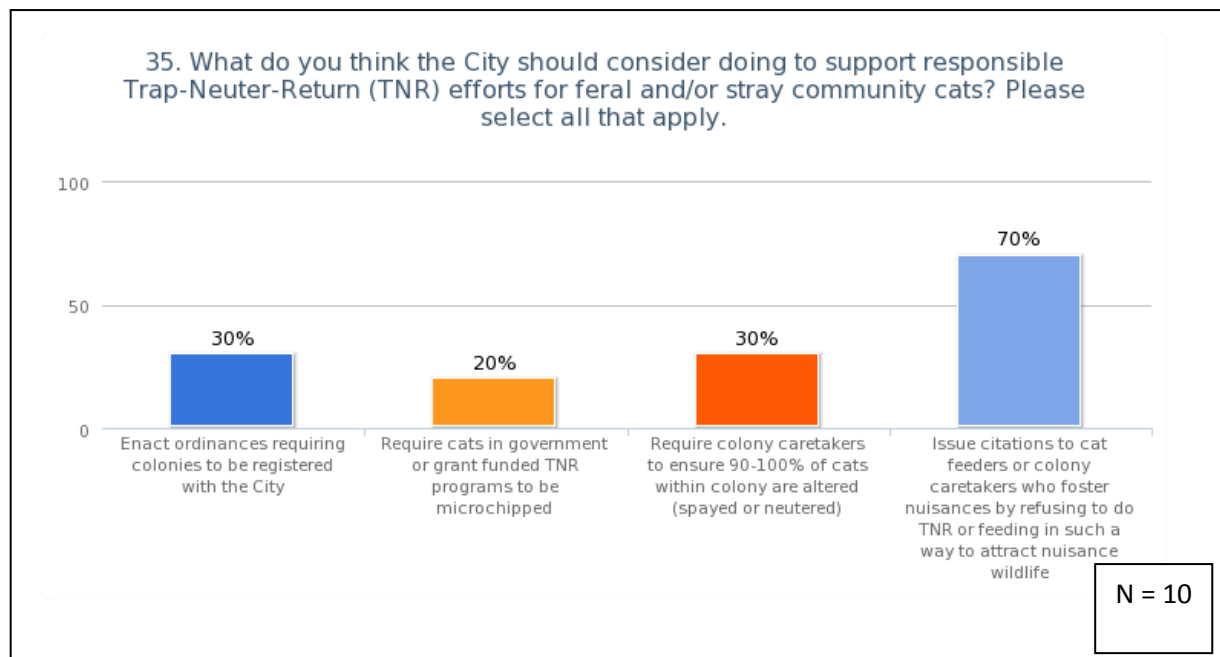
Questions 33 and 34 had to do with licensing requirements and perceived barriers licensing. Answers will be considered along with field noted and key informant data to guide strategic marketing efforts within multi-family communities. Question 33 asked whether property owners



knew cats are required to be licensed in Citrus Heights. Question 34 asks respondents for their opinions regarding barriers to pet licensing.



The majority of managers reported that tenants either don't know or don't care about licensing requirements. One of the final questions asked the managers their thoughts as to what City should consider to support responsible TNR programs. As shown in the chart for *Question 35*, there is a clear desire for the City to issue citations in situations where the TNR provider is



contributing to nuisance issues.

A final question allowed participants to share general comments or suggestions specific to the City's TNR efforts. Three different managers offered one suggestion each: 1) "It should be a legal requirement for all communities to have a spay/neuter certification, as well as residents must have proof of rabies and registration for cats and dogs"; 2) "The feral cats have been a major problem at our property for quite a few years. They have become quite a nuisance and the population has gotten out of control. It would be nice if there was some type of program put in place. It is very inconvenient to take them to Sac County SPCA and not very cost effective to have them picked up"; and 3) "We had one cat show up and before we knew it there were 13. We worked with Sac Ferals to TNR all 13 of them. The owner of the property covered the cost for each cat. They have really cut down on the rodent population." All three manager's comments are important information for the researcher.

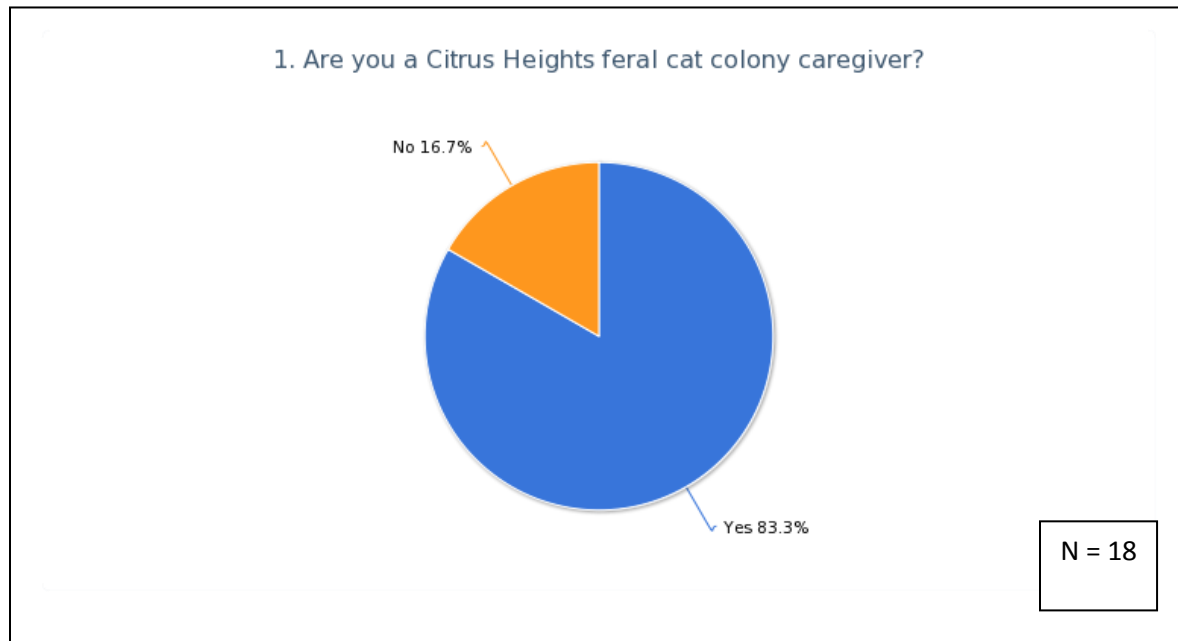
The data shows there is support to require spay/neuter proof as well as licensing and vaccination status. The comments also demonstrate how quickly one or two cats can multiply into problems for the property manager and also that collaborative TNR efforts can be successful and even beneficial, a point that has been reflected in the literature review, key informant interviews and in field notes. It is important to recognize one of the key factors to successful TNR is continued monitoring and ensuring any additional cats entering a particular area are also altered.

Survey Subgroup 2 – Citrus Heights Cat Colony Caregivers

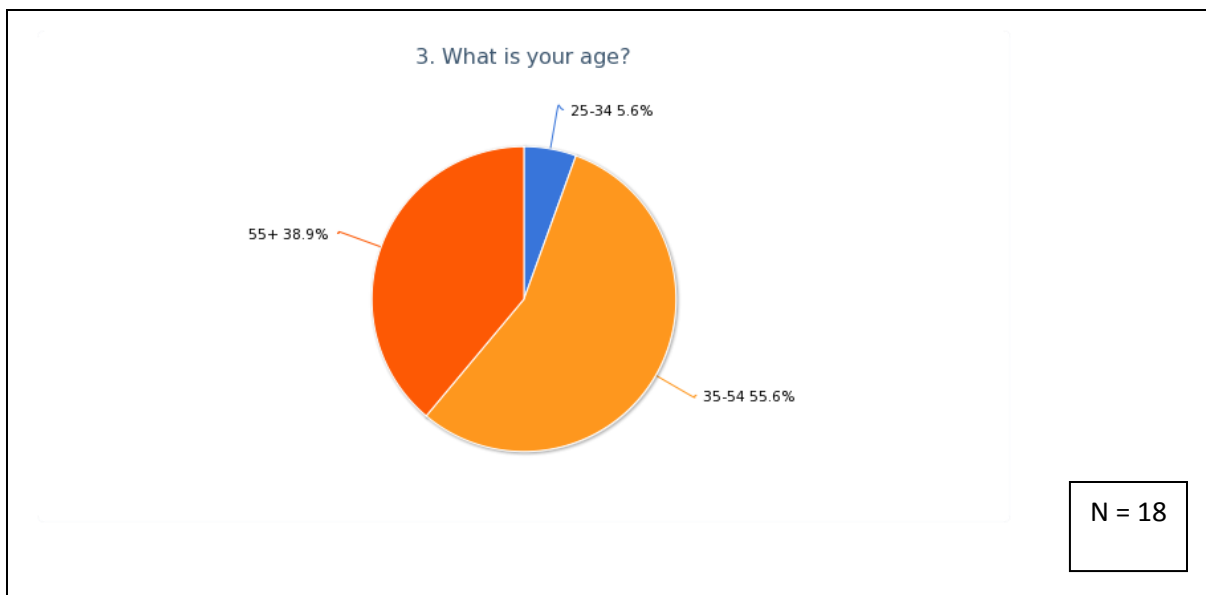
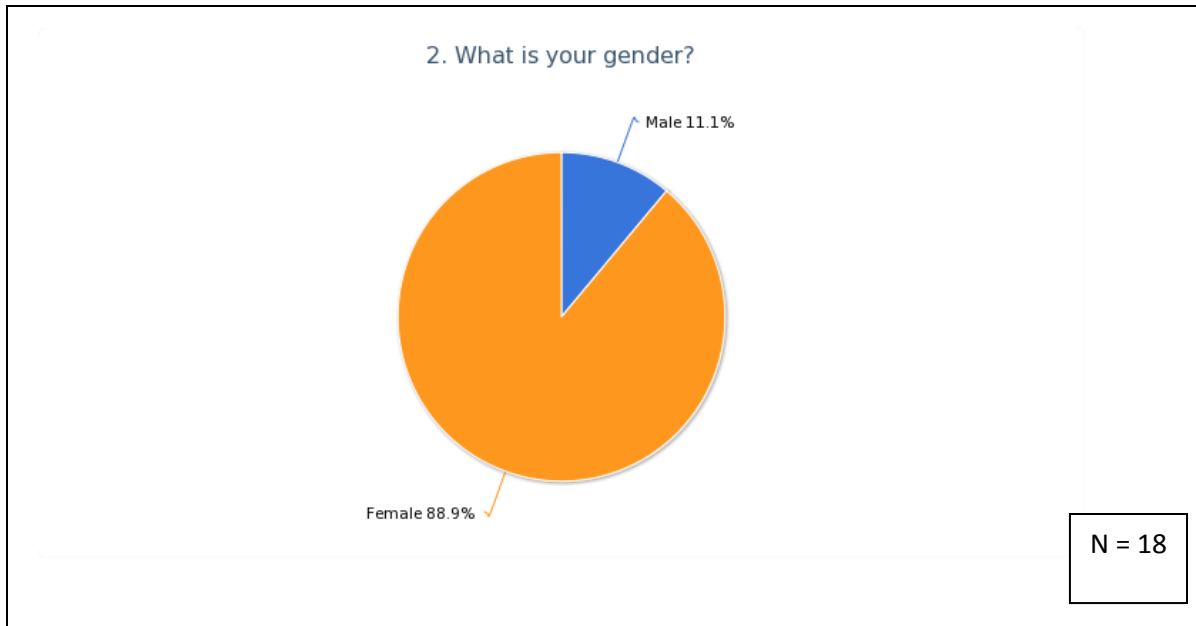
Survey No. 2 A was formatted to solicit data related to the colony caregiver experience in Citrus Heights. The 51 question survey asked questions related to colony and caregiver characteristics, use of the SAAC and the RCCR voucher programs, cat licensing and regulations, TNR policies, nuisance issue occurrence and resolution and an open ended question for the respondents to provide suggestions to the City.

These questions were included in order to collect data unique to Citrus Heights and compare it to findings within the literature review and primary data findings through the listserv survey, multi-family survey, key informant interviews and participant observer data. This subgroup is particularly important because as a whole, the caregivers operate under the radar in the City. One of the assumptions of the study is that a win-win TNR program includes the need to build rapport and trust with this subgroup. The 51-question survey was distributed to 26 Citrus Heights feral cat colony caregivers who utilized the SAAC feral cat voucher program between July 2013 and January 2014. A total of 18 or 69% of those invited to participate responded to the survey, with an average of 11 responses (42% overall response rate) provided per question. All questions allowed the respondent to opt out if desired. The analysis that follows is organized by the thematic sections of the survey instrument.

Research Survey Questions 1-6 were geared toward caregiver characteristics. Question No. 1 (n=18) asked if the respondent is a Citrus Heights feral cat colony caregiver. Eighty-three percent (83%) responded yes; 16.7% said no. Question No. 2 asked the caregiver gender.

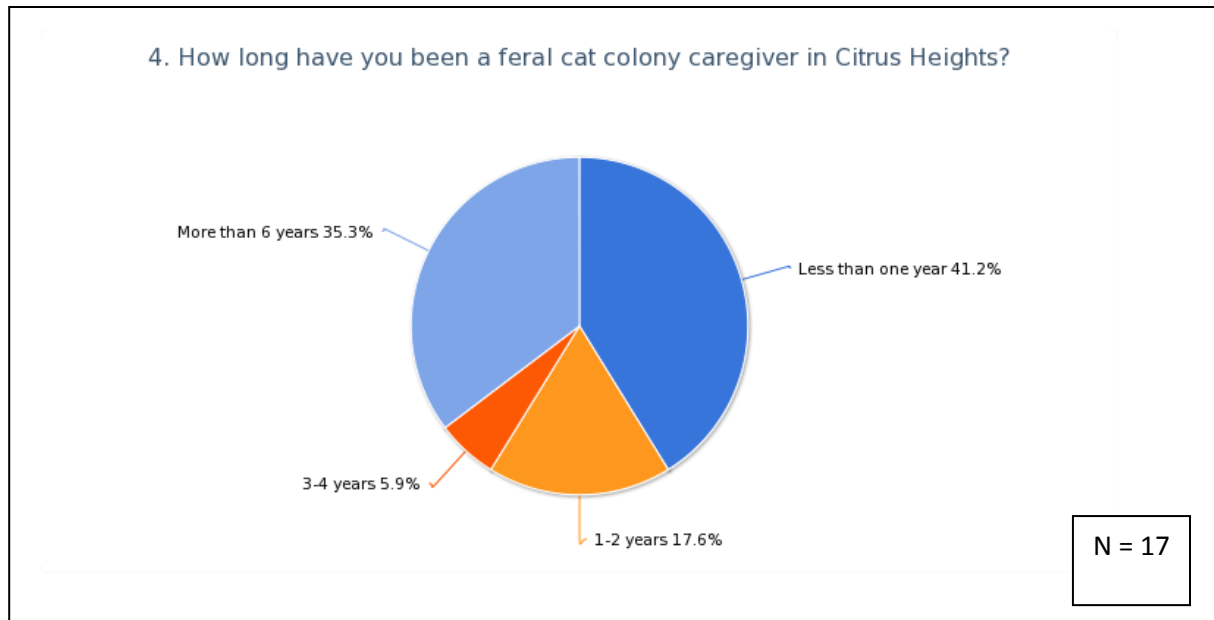


Females make up 88.9% of respondent caregivers; 11.1 % responded as being male. Question 3 requested general age ranges, with 17 of the 18 respondents age 35 and over.



This is consistent with the Centonze et al (2002) portrait of the typical caregiver as far as gender and age, however the average five dollar (\$5) per week investment cited by the Centonze et al study (2002) is a little low compared to the colony caregiver respondents. An explanation for the differential could be that current data reflects 12 years since the Centonze et al (2002) study was published and the current sample size is much smaller. Question 4 asked respondents

how long they have been a colony caregiver and Question 5 asked about Rescue Group

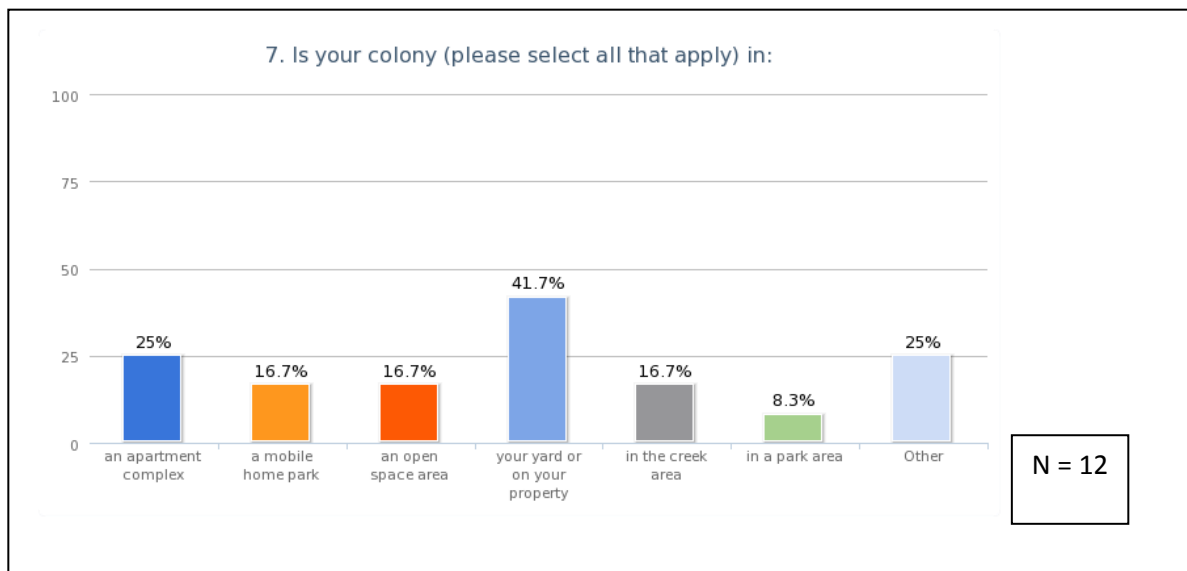


affiliations. Answers to Question 4 (n=17) tell the researcher how long caregivers who are active TNR proponents have been working in the City.

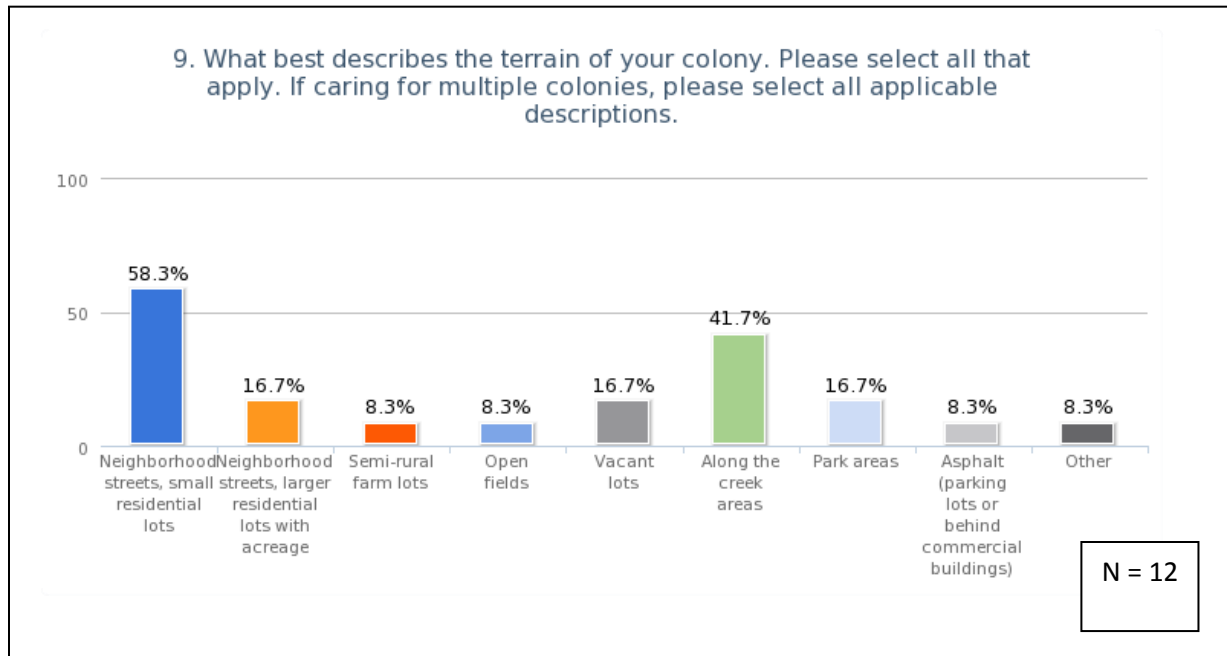
Question 5 answers (n=12) will give the researcher data regarding which rescue groups are utilizing SAAC or RCCR vouchers to provide spay/neuter services for cats in Citrus Heights. The comment section for this question included one comment, “Have used Cats About Town foster/surrender program to place cats/kittens and River City Cat Rescue for spay vouchers when I placed myself.” Research Question 6 (n=3) asked the respondent to share any additional affiliations. One respondent stated, “I am a county volunteer, cat fostering, TNR release for cats in the area”. This response indicates this person takes cats that have been altered through the County’s “community cat” “return to field” program and does transport and “return” work for the program. A second respondent to Question 6 reported an affiliation with SAAC. The third respondent to Question 6 simply said, “no”. Question 8 was removed after two beta testers

advised the researcher that to ask respondents to share the actual location of the colony would likely result in a much lower participation rate.

Prior to removal of the question, one respondent shared a location the researcher was not aware of near a transit center in the City. *Research Questions 7 and 9* were structured to obtain data related to cat colony geography. For each question, the respondents were given multiple environmental descriptors and could select all that applied. As shown in the *Question 7* chart, 41.7% of reported colonies maintained on the caregiver's property, with apartment complexes or mobile home parks and open space or park areas also identified as colony locations. This is significant for the study because it affirms data from stakeholder interviews about the need to focus resources in open space and multi-family communities. It is also consistent with nuisance complaint data frequently reporting issues with "too many cats" in locations with similar characteristics (participant observer knowledge).



As shown in the response chart for *Question No. 9* (n=12), there is a mix of terrain supporting cat colonies within the City, with 58.3% reporting colonies are within the neighborhoods and the rest maintained in a variety of open space configurations. This supports



the need to ensure TNR resources are accessible within neighborhoods and not just the larger lots and open spaces.

10. How many cats were in the colony when you first started providing care? Please state the number you started with in each colony. Example: colony 1 had 4 cats; colony 2 had 20 cats; etc.

Respondent No. 1 reports --1 colony 3 cats

Respondent No. 2 reports -- 1 had 6 cats

Respondent No. 3 reports -- 10+ cats

Respondent No. 4 reports -- 12 cats

Respondent No. 5 reports -- 1st colony had-5 cats; the 2nd-6 cats

Respondent No. 6 reports ---20 cats

Respondent No. 7 reports -- 4 cats

Respondent No. 8 reports --I feed a small colony, 10 - 15 cats with other volunteers and one main carer who traps.

Respondent No. 9 reports --Just one feral who showed up in our backyard.

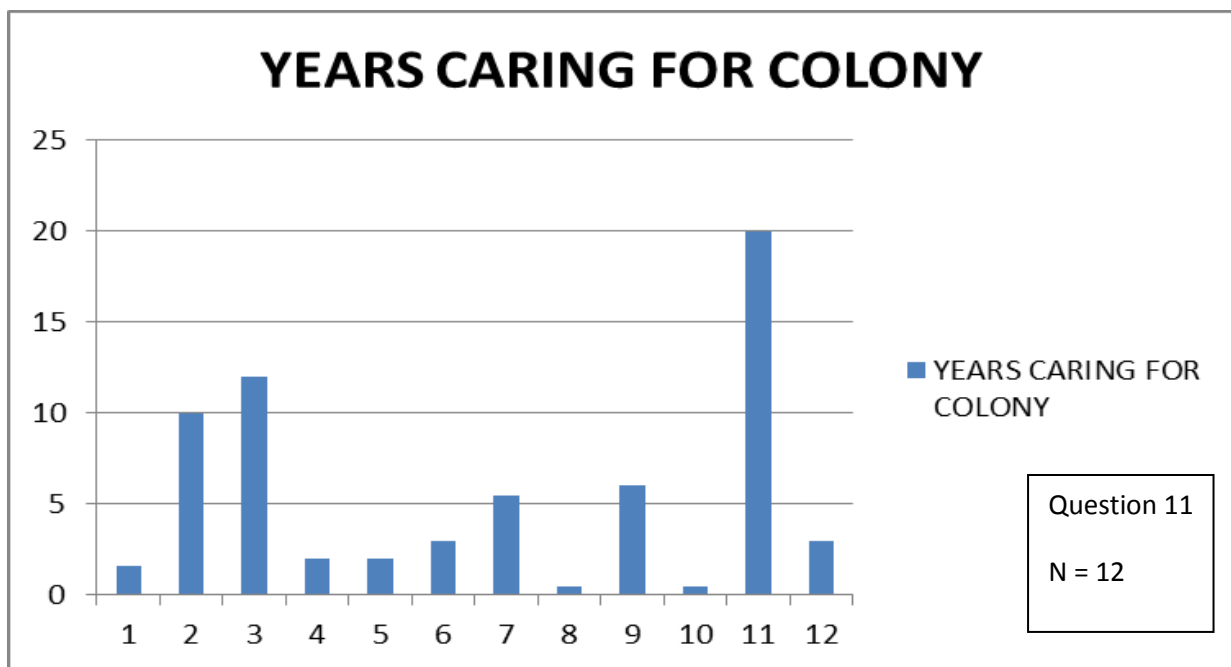
Respondent No. 10 reports -- about 50

Respondent No. 11 reports -- colony 1 had 6 cats colony 2 had 6 cats

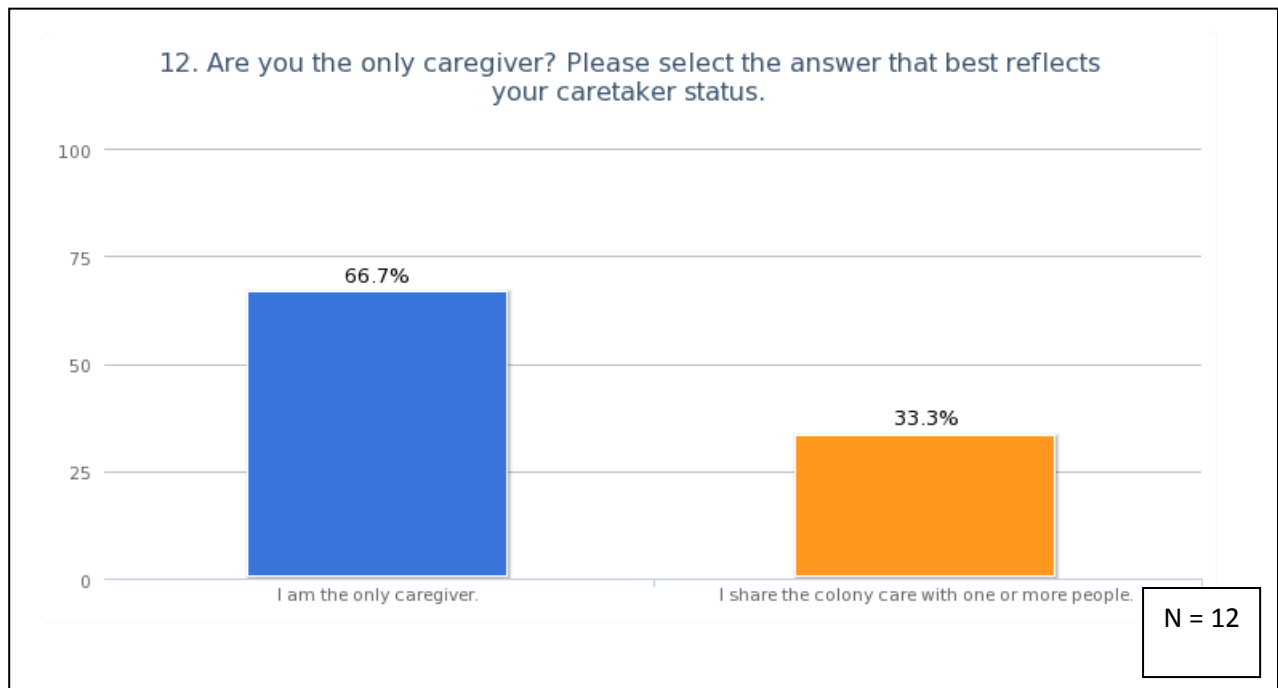
Respondent No. 12 reports --- unknown number

N = 12

Research Questions 10 – 12 sought to obtain information about the colony relationship with the caretaker. Question 10 asked “How many cats were in the colony when you first started providing care?” (n-12). Question 11 asked “How long have you been caring for this/these colonies?”. Responses (n-11) indicate an average of 33.3 years caring for colonies between the caregivers, and a mean of 3 years. This indicates about ½ the caregivers have colonies that have been in existence for many years. This also aligns with responses to Question 4 which indicated a majority of colony caregivers active in Citrus Heights for less than four years and 41% for less than one year.



Question 12 sought information to determine how many colonies were functioning with only one caregiver. Responses indicated 66.7% of caregivers operate alone and 33.3% have help from one or more people. The large number of solo caregivers is important because if they are unable to care for the colony, there will be a need for another caregiver to step in to prevent welfare and/or nuisance issues. In the Sacramento region, the researcher has observed challenges



occur, particularly when a solo caregiver has to move or becomes disabled. This will be important as the City learns where maintained colonies are located and identifies appropriate supportive actions.

Question 13 asked “How many are in each colony now?” Survey responses (n=11) indicate most Citrus Heights colonies working through the SAAC voucher program started with less than ten (10) cats. Three (3) caregivers said they cared for colonies with more than 10 cats with 20, 10-15 and 50 cats reported respectively. Responses to Question 12 (n=12) suggest that colony numbers in some cases have decreased over time and in others have stayed the same or

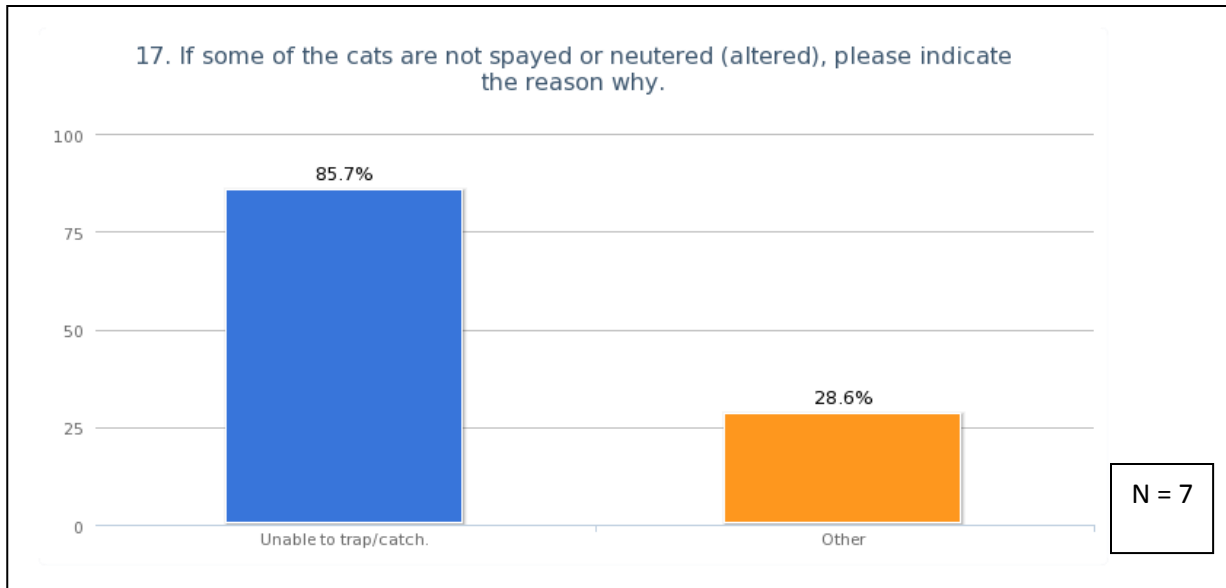
increased. It will be important to focus TNR attention on colony locations where populations are increasing as a first step in City TNR program implementation.

Research Questions 14 – 21 are structured to gather cat colony population characteristics.

Research Question 14 asks, “How many cats in each colony are altered?” Responses (n=11)

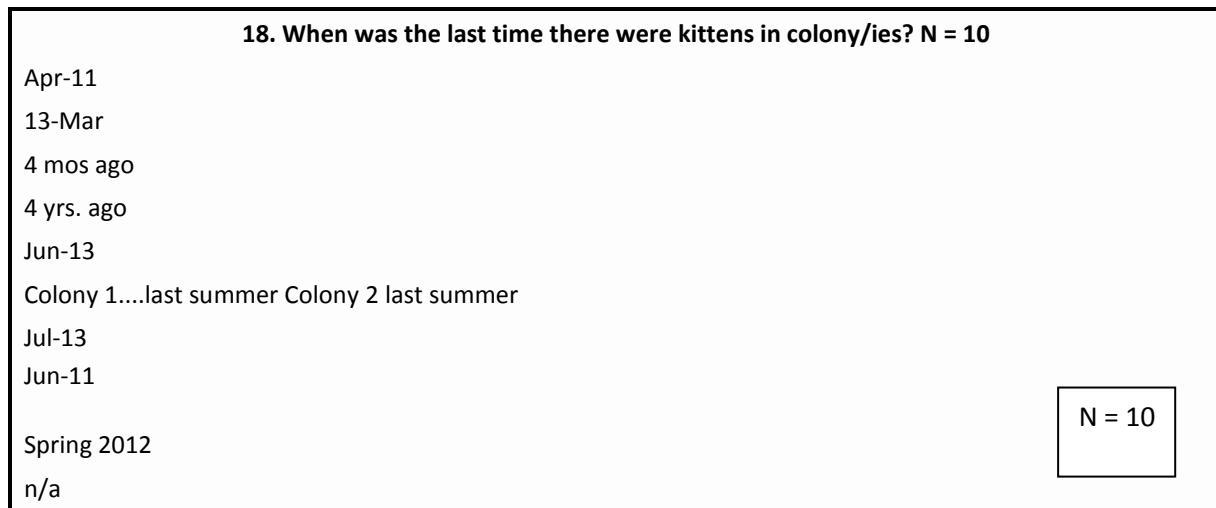
indicate the colonies utilizing the SAAC voucher program are between 75 -100% altered. This suggests the SAAC voucher program is an effective tool to support effective colony management through TNR efforts. Question 15 asks, “How many of the cats in each colony have had at least one rabies vaccination?” This question seeks to determine if TNR practices purported to include vaccinations are actually doing so. All but two respondents (n=11) report between 80-100% of the cats have had at least one rabies vaccination. Two respondents reported they don’t know if the cats are vaccinated for rabies or not. Question 16 was removed shortly after launch due to SAAC and RCCR guidance to shorten the length of the survey. The question had asked about the barriers to vaccinations in colonies. The two respondents both indicated the challenge of catching the cats is the main barrier to vaccinations. This is consistent with data from the literature review as well as participant observer field notes.

Question 17 asks, “If some of the cats are not spayed or neutered (altered), please indicate the reason why.” The top reason reported (n= 7) for unaltered cats was the inability to catch them (85.7%). Cost was not selected by any of the respondents, which is not that surprising because the survey subgroup are all beneficiaries of the no or low cost feral voucher program. The “other” option was selected by two (2) respondents as the reason for not intact cats remaining in the colony. This is important because it supports the need for skilled trapping

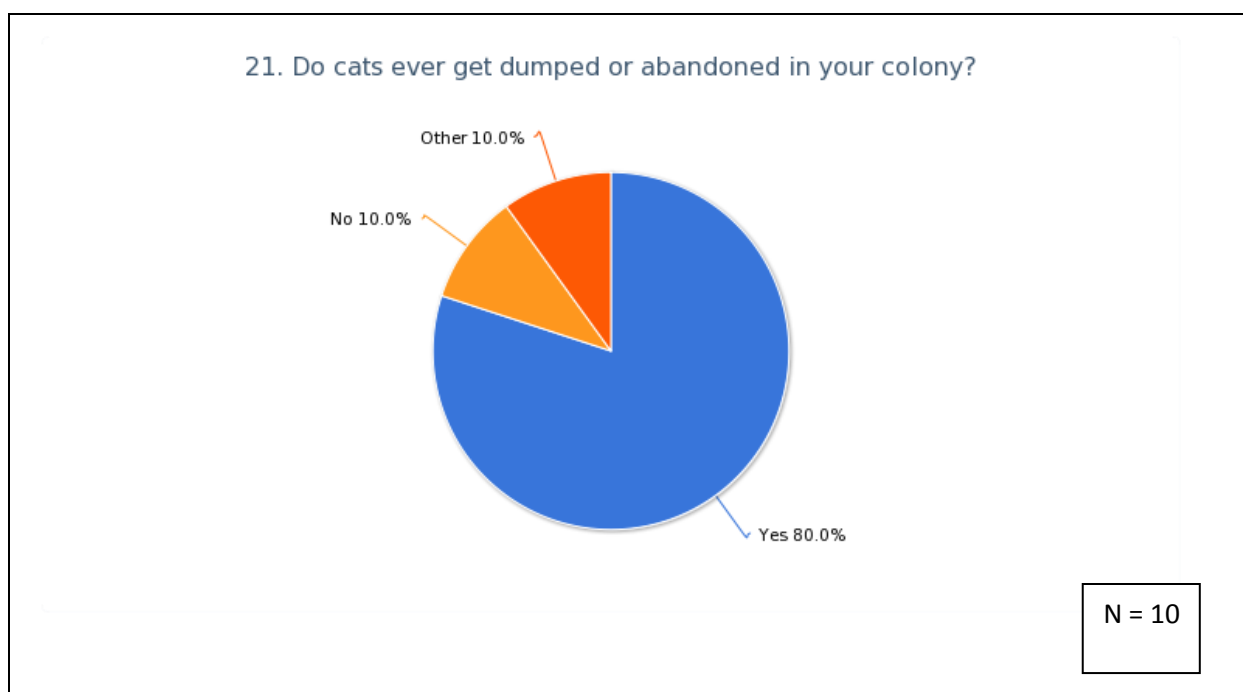
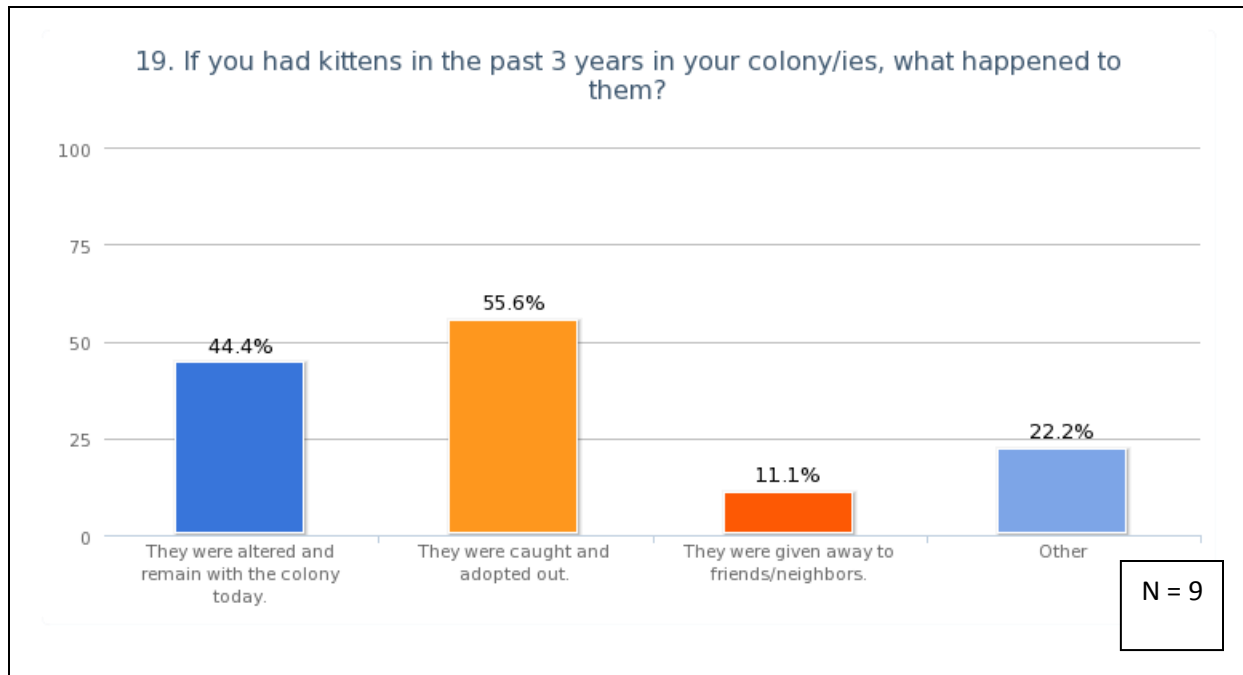


assistance for colony caregivers, a recommendation common in the literature review and articulated during several of the key informant interviews.

Along a similar vein, *Question 18* asks, *“When was the last time there were kittens in your colony/ies? Please provide an approximate date for each colony you care for.”*



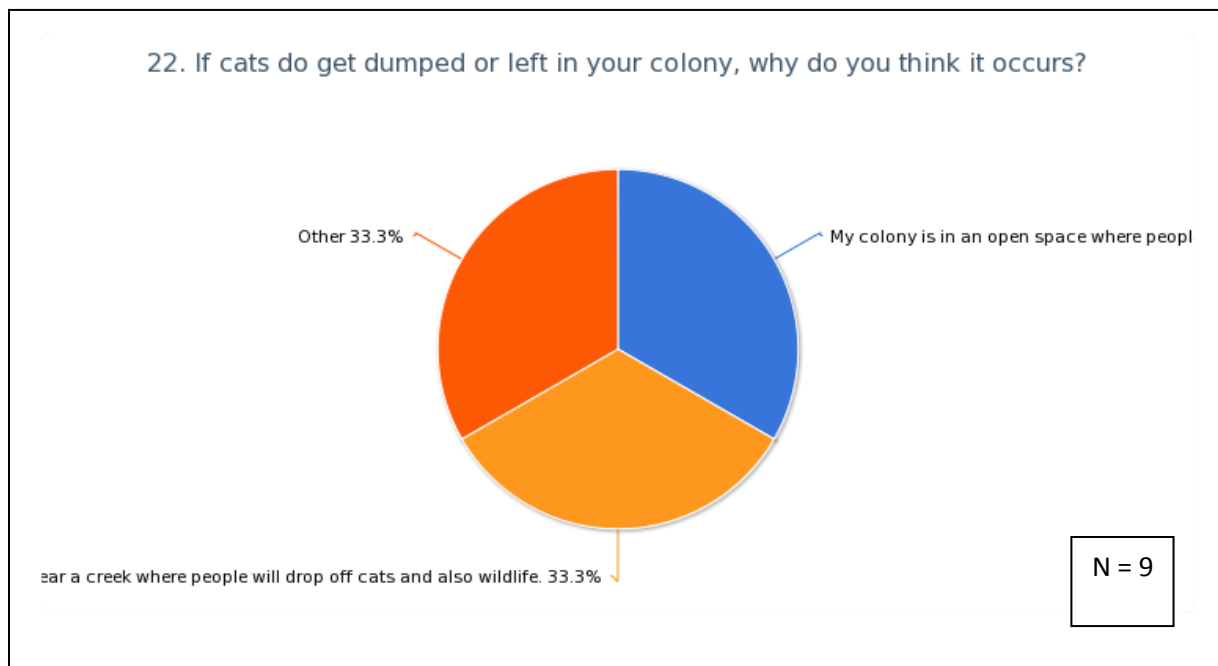
Question 19 asks, “*If you had kittens in the past 3 years in your colony over the past few years, what happened to them?*”. *Question 20* also seeks outcome data for colony kittens by asking, “*If you had kittens within your colony over the past 2 years, how many can you confirm were altered?*”. Responses indicate the majority end up altered (n=8) with 3 respondents stating all



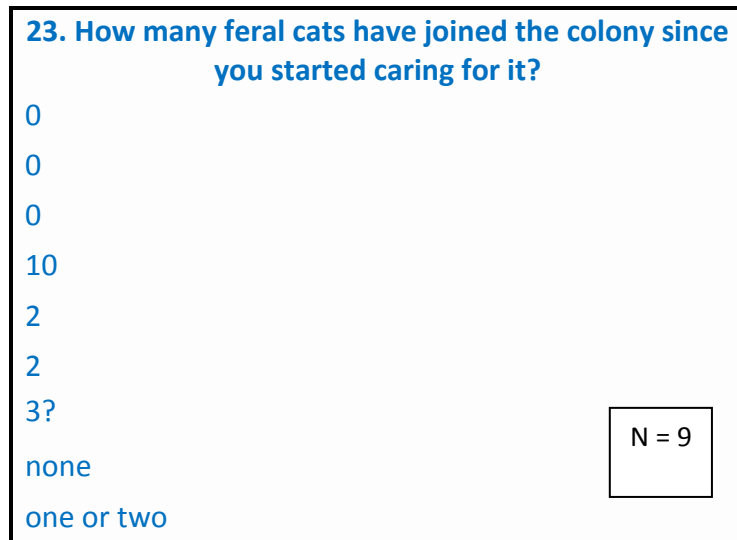
were altered, one stating there were no kittens, one saying 10 of 14 were confirmed as altered, one stating 2 were altered and one stating that it is hard to say. This is important because it shows there are colonies that will likely need minimal assistance, but there are also those that do need help to improve and maintain the sterilization rates in the colonies.

Research Questions 21-23 are related to new cats being dumped or arriving in the colony.

Question 21 asks, “*Do cats ever get dumped or abandoned in your colony?*”. Eighty percent of respondents (n=10) indicate this does occur. Responses to the follow up Question 22, “*If cats do get dumped or left in your colony, why do you think it occurs?*”, suggest the majority of dumping occurs in colonies located in open spaces or creek areas. Respondents (n=9) think the dumping occurs because the colony is known to exist.

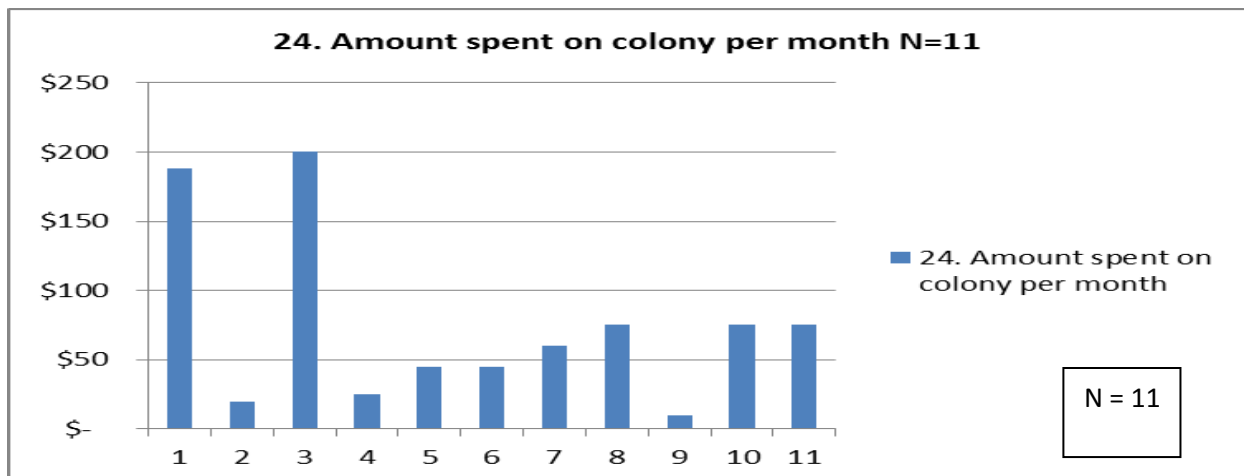


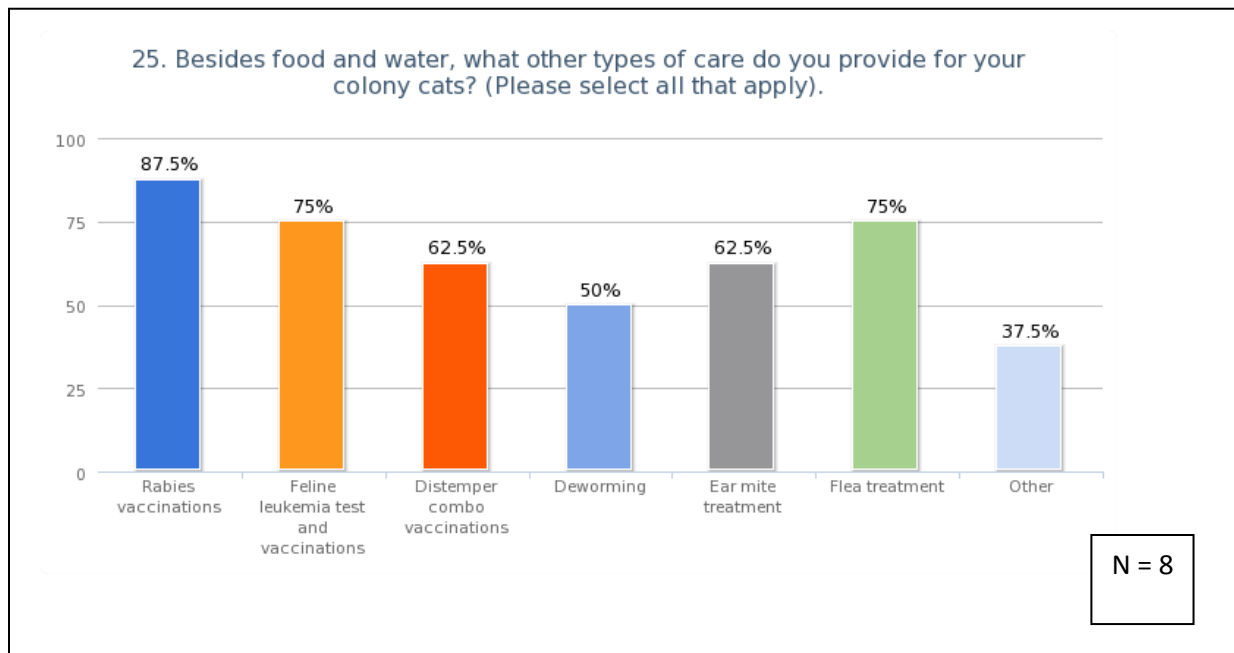
Question 23 collected data on the quantity of cats added to colonies, asking, *“How many feral or stray cats have joined the colony since you have started caring for it?”* (n=9). Responses



to this question indicate the addition of cats to colonies does occur. This is likely a function of the area where the colony is maintained, with open space areas being more likely to see new cats show up in the colony.

Colony investment was the focus of Research Questions 24 -26. Question 24 asked, *“How much money do you spend on cat food/supplies per colony every month (on average)?”*. Responses (n=11) ranged from a low of \$8-10 per month to a high of \$200, with \$67.50 being the average spending investment for this subgroup.



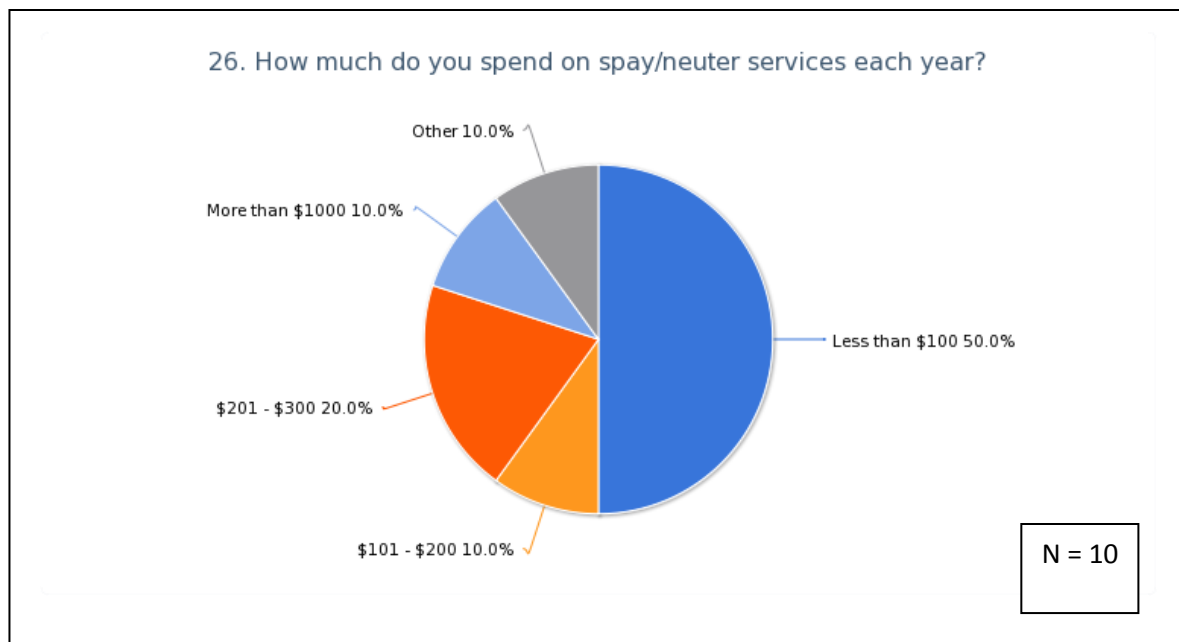


Question 25 asked, “*Besides food and water, what types of care do you provide for your colony cats?*”. Respondents had a menu of selections to choose from and the option to fill in an “other” selection. Vaccinations were the largest group of caregiver investments, with parasitic treatments also high on the types of care supported by caregivers. This is important because grant funding is typically focused on spay/neuter surgeries. In the PetSmart grant programs the researcher is familiar with, rabies vaccinations may be included, but no other vaccinations are. Thus, the added value investments by the caregivers to minimize disease and parasite transmission are an important consideration when evaluating benefits of TNR programs. Relative to the literature review, if there is community resistance related to health issues and disease transmission, the fact that most caregivers go beyond providing basic food, water, shelter and sterilization provisions has significance.

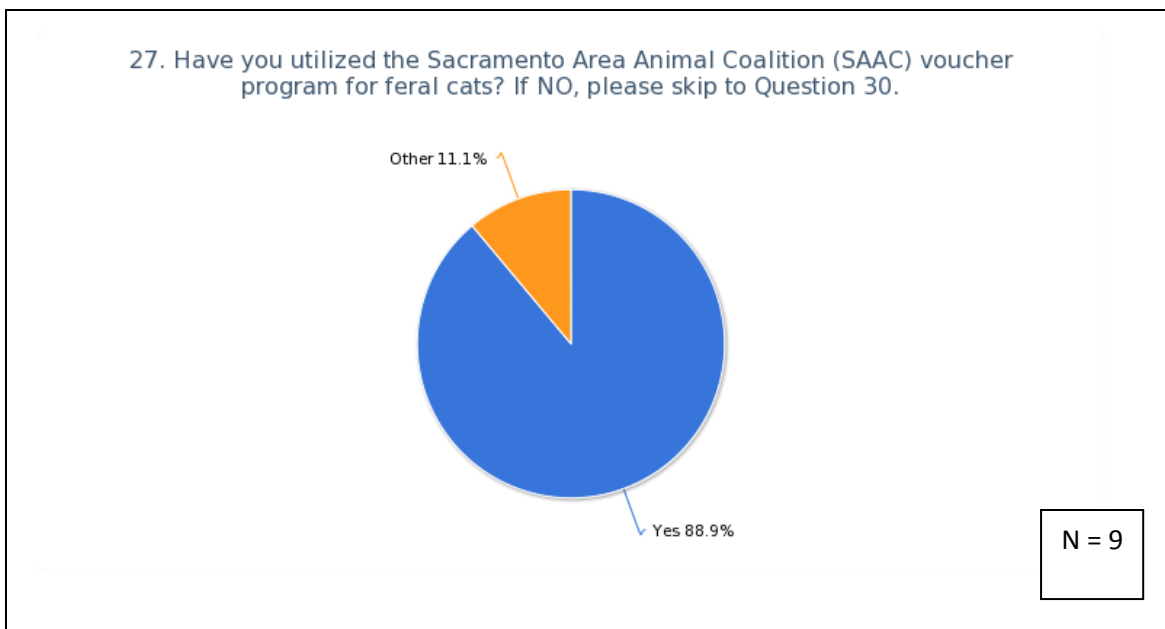
This is especially important to take into consideration when contemplating a “do nothing” approach by local government. From the participant observer perspective, one of the most

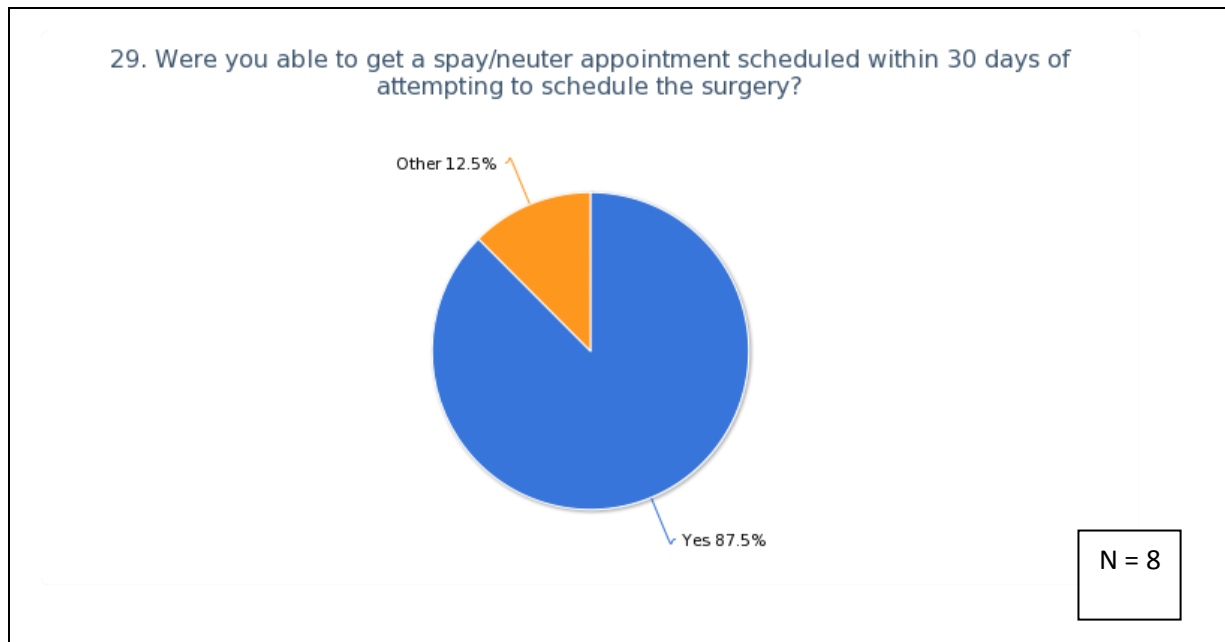
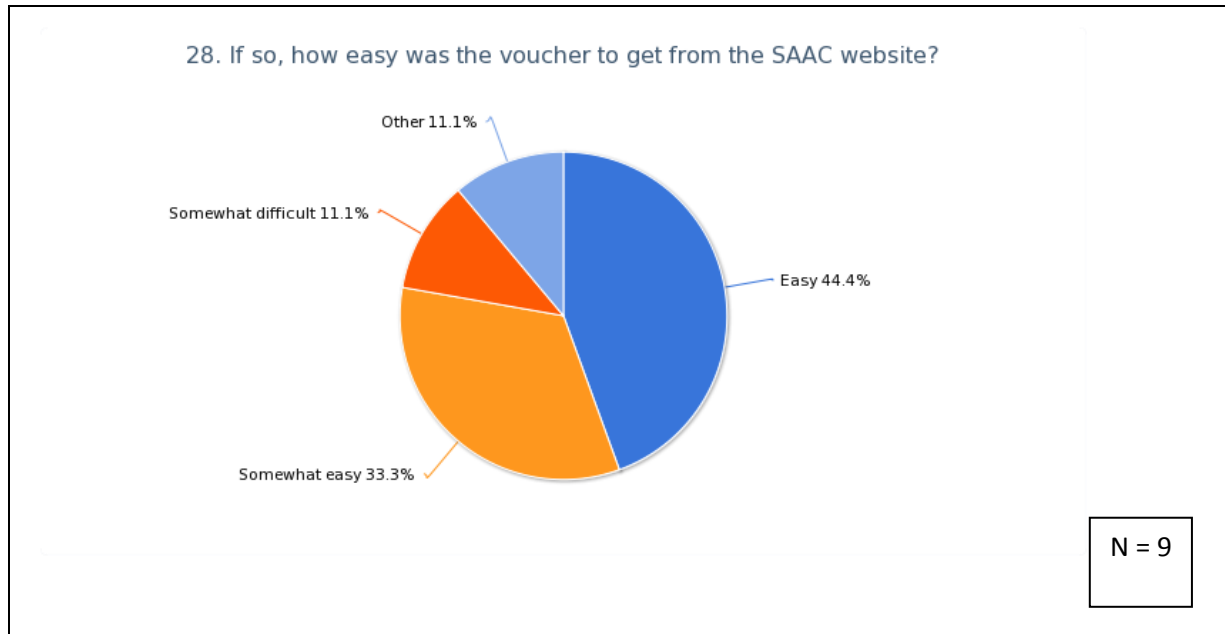
frequently cited issues from cat nuisance reporting parties are garden and landscaping contamination. The level of insistence on government intervention rises substantially when fleas, worms or flies enter the mix. This is supported in the key informant interviews with the program assistants as well.

The final survey question in this series is seeking a sense of the colony caregiver investment toward spay/neuter services above and beyond what is provided through various low and no cost voucher programs. To that end, the participants were asked *Question 26, “How much do you spend on spay/neuter services each year?”*. Just under half of the colonies surveyed responded (n=10), with 50% reporting they spend less than \$100 and one respondent saying they spend over \$1,000 and another stating they spend nothing on spay/neuter costs as they only utilize the voucher programs.



The next series of questions are geared toward the functionality of the City's two spay/neuter voucher programs. To that end, *Question 27* asked, "Have you utilized the Sacramento Area Animal Coalition (SAAC) voucher program for feral cats?" and directs the respondent to skip to question 30 if the answer is NO. All but one of the respondents said they had used the SAAC voucher program with the lone dissenter stating they utilized the River City Cat Rescue (RCCR) voucher program. *Question 28* asked, "*If so, how easy was the voucher to get from the SAAC website?*". All respondents stated it was easy or somewhat easy except for two. Of those, one said it was somewhat difficult and one said the used RCCR.





Question 29, “Were you able to get a spay/neuter appointment scheduled within 30 days of attempting to schedule the surgery?” intended to measure if participants were able to schedule surgeries within a reasonable period of time. Appointments within 30 days were realized by 87.5% respondents (n=8), and the other 12.5% reported being able to do so “most of the time”.

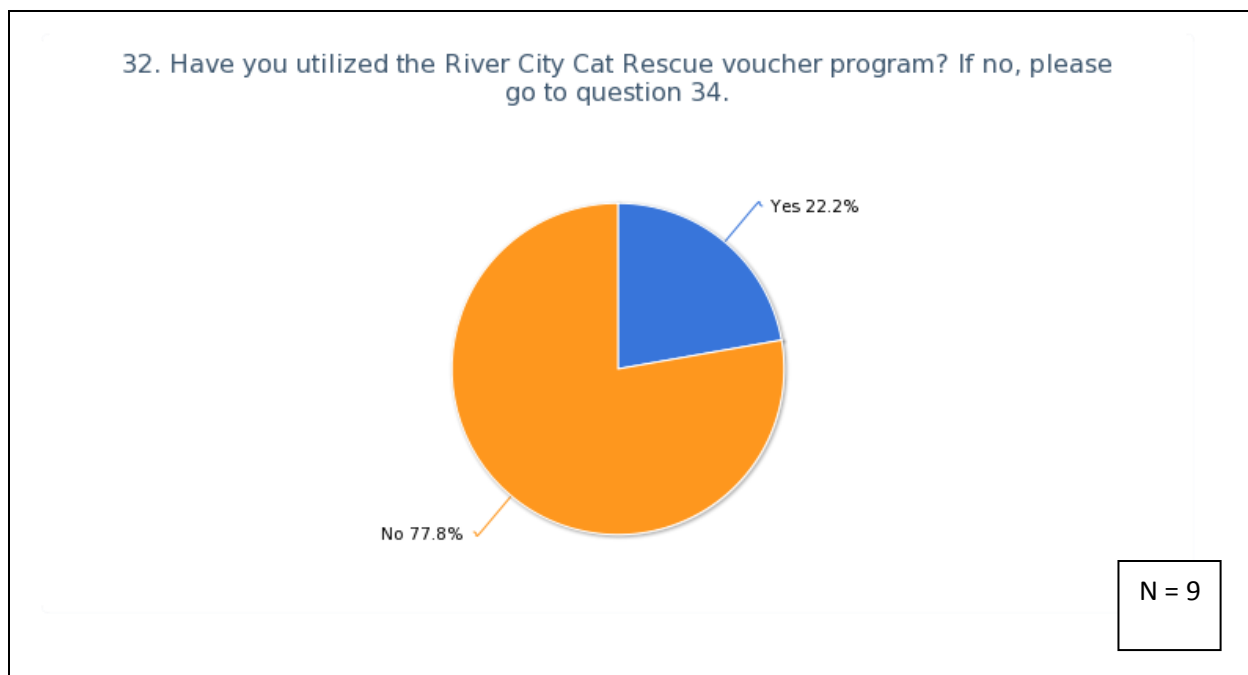
This is important because based on participant observation and key informant interviews, the ability to get cats into surgery when caught is a critical component of a effective TNR program. In the Sacramento region there Sacramento SPCA provides low cost feral cat surgeries on the first four (4) Sundays of every month, and there are other avenues for feral spay/neuter services within the TNR veterinary networks and beyond the SAAC and RCCR voucher programs, resulting in a robust spay/neuter infrastructure in the Sacramento region.

This Sacramento area “bandwidth” is a key component for sustained success according to several of the key informant interviews. This region has notable benefits in this arena because per key informant 10 and researcher field notes, many TNR realms do not have the breadth of collaborative and supportive surgical and administrative infrastructure available within the greater Sacramento region.

Question 30 in this series is designed to obtain suggestions for improvement to the SAAC voucher program, “What would you suggest to improve the SAAC voucher program for Citrus Heights users?”. Respondents (n=8) noted the importance of public awareness (2 respondents) and the fact that the when the caregiver is down to the last few trapping targets, there needs to be flexible expiration on the vouchers (2 respondents).

While from a caregiver perspective a flexible expiration date is may be important, from a program management perspective, it is also important to ensure vouchers are used within a reasonable time frame. This ensures that liability for unused vouchers does not prevent much needed surgeries from occurring. The final question for the SAAC process was an open ended Question 31, “What do you like best about the SAAC voucher program?”. The key response takeaways (n=8) revolve around the low and no cost nature of the vouchers (2 responses),

inclusion of rabies and other vaccinations in the program (1 response), ease of use (1 response) and the ability to choose from a variety of participating veterinarians (1 response). The remaining responses indicated “it works” and “the convenience of choosing vet...family friends...just around the corner from me and open 7 days/wk” respectively. Both responses are consistent with key informant input, particularly from the non-profit and City key informants, related to the need for the program to be easy to use with accessible veterinarians (ability to schedule and close proximity).



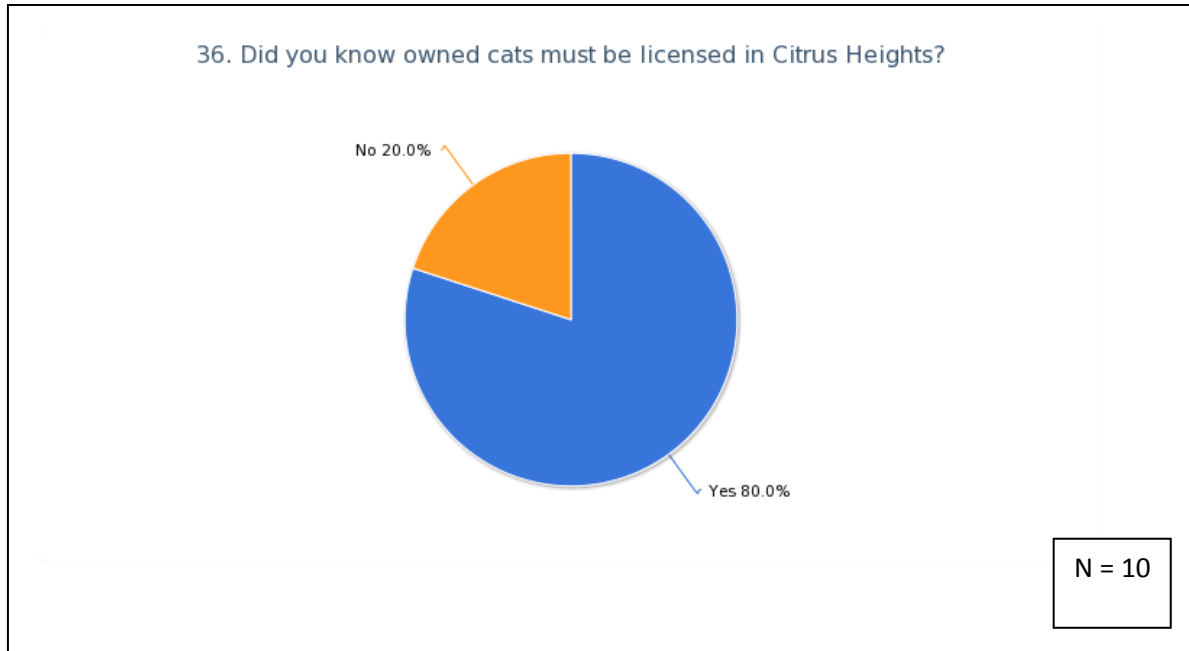
The River City Cat Rescue (RCCR) program was also examined in this question series, with only 2 of 9 respondents indicating an experience with RCCR (*Question 32*). Of those, both participants expressed affirmative results to *Question 33, “How easy was the voucher to get from the River City Cat Rescue website/phone number?”* The key respondent observation was the



need for public awareness of the voucher program. RCCR voucher users responding to this survey question reported affirmatively (100%, n=2) on the *ability to schedule an appointment within 30 days of attempting to schedule (Question 34)*. One of the two (2) respondents selected the choice of “very easy” and the other selected “easy” as their rating of ability to schedule appointments. RCCR has a primary veterinary partner just outside the city limits and another veterinarian that helps when available. Participant observer data recognizes the importance of having multiple local veterinary clinics engaged to ensure capacity during high demand seasons.

The next two questions dealt with the caregivers’ understanding of existing regulations. To that end, 80% of respondents knew that owned cats must be licensed in Citrus Heights

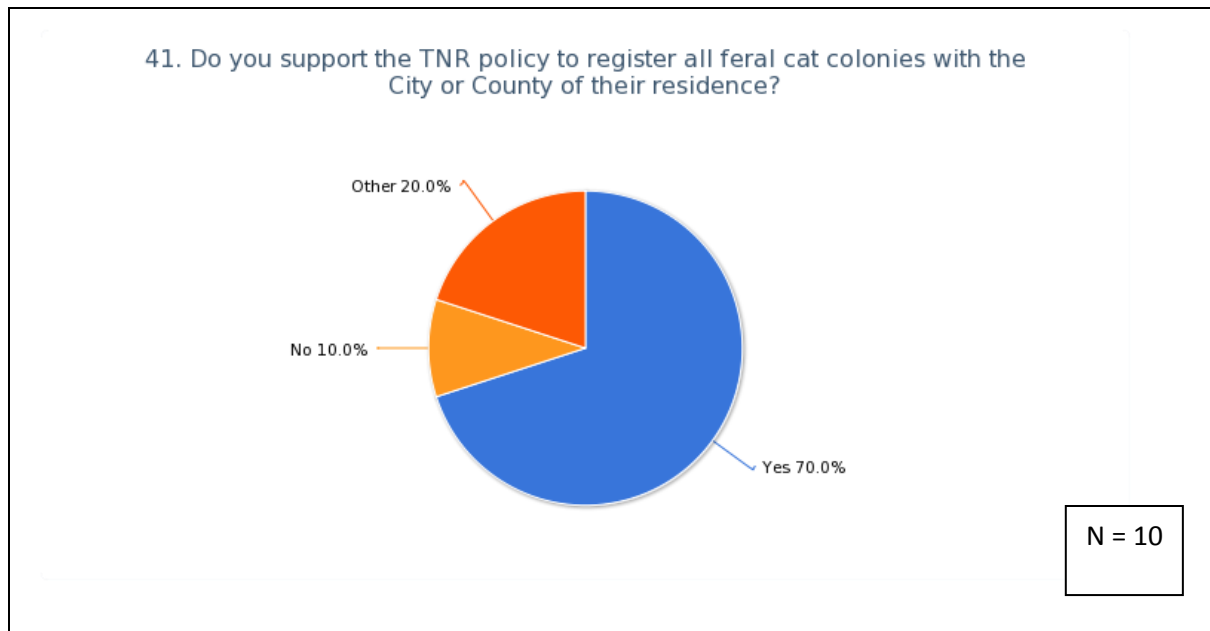
(Question 36) but only 30% knew that there is an exception within the ordinance for cats within



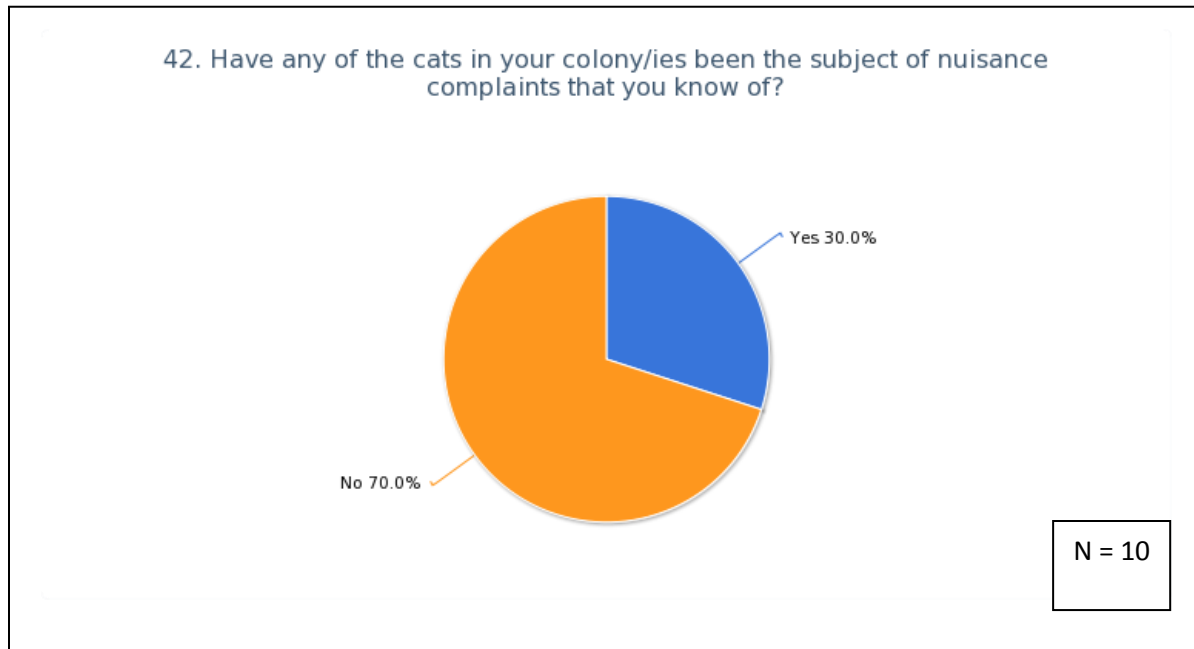
active TNR efforts (Question 35). These responses substantiate recommendations from stakeholder interviews relative to education and outreach. This also speaks to literature review and the key informant interview findings regarding a tendency of most colony caregivers to distrust government in general and animal control specifically.

Research Questions 38 – 41 were intended to obtain the caregivers' input about governmental management of cat colonies. Question 38 asked, "What is your recommendation for the City to address colonies where several cats remain unaltered?". Ninety percent of respondents (n=10) recommended additional TNR efforts with 60% specifically citing the need for help with trapping. One suggestion included a need for access to humane traps; another recommended hiring people (trained by RCCR) to provide assistance with trapping. Questions 39 and 40 were eliminated after one response to reduce survey questions. In Question 41, the

issue of colony registration was examined. Responding to question 41, *“Do you support the TNR policy to register all feral cat colonies with the City or County of their e?”*, 70% of caregivers agreed with this policy, 20% disagreed and 10% selected “Other”, stating “not sure”.

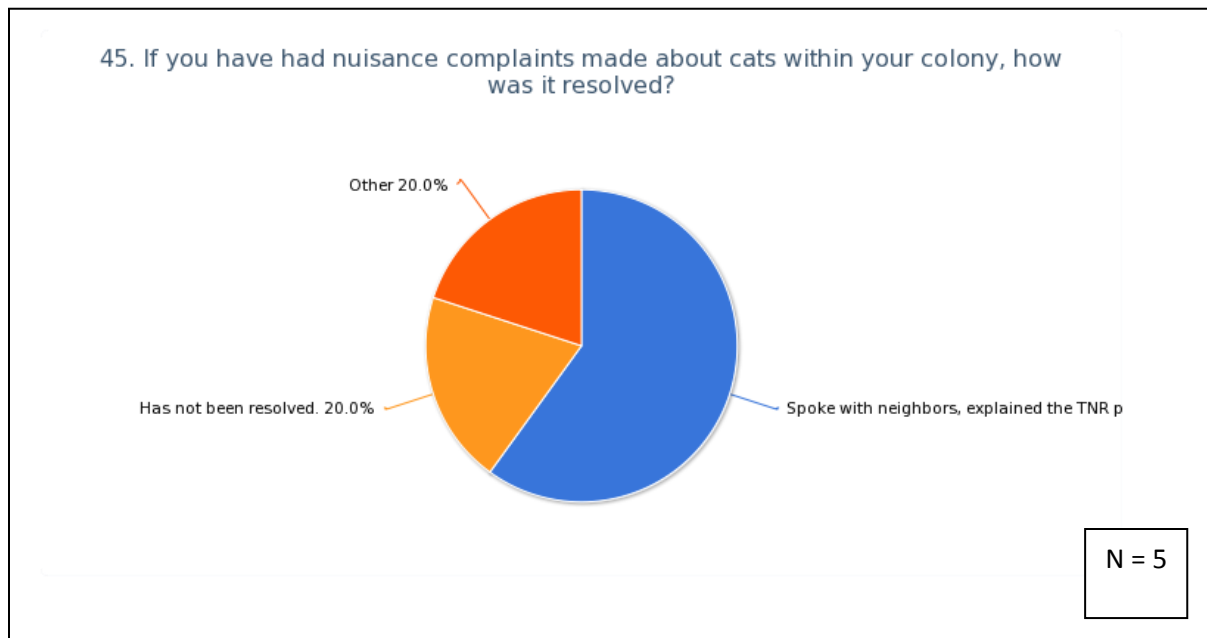


Research Question 42 asked, *“Have any of the cats in your colonies been the subject of nuisance complaints that you know of?”*. Thirty percent responded yes and 70% responded no. In Question 39, respondents were asked, “If you have had nuisance complaints made about cats in your colony, how was it resolved?”. Sixty percent reported resolution by speaking with neighbors and making adjustments to address concerns. One respondent indicated the issue has not been resolved and another stated the neighbors are supportive of the TNR efforts. This data suggests that in cases where TNR is working properly, nuisance issues are being managed. Since all participants in this survey know about the spay/neuter resources available, the argument can be made that TNR works when the caregiver has the resources to trap, provide



surgeries and return the cats to a location where they can be safely managed. The final questions of the caregiver survey sought respondent opinions on best practices in general and specific recommendations for the City. *Question 43* was eliminated in the interest of reducing the question tally. *Question 44* asked, “Are there any organizations (locally or nationally) that you believe ‘are doing things’ right? If so, please list and provide a sentence or two about the specific policies/strategies that are working.”. Respondents (n=3) identified Sacramento County’s community cat program (1 respondent), Fluff Buddies (1 respondent) and River City Cat Rescue (1 respondent). This is consistent with staff key informant data and participant observation.

Research Question 45 asked, “If you had nuisance complaints made about cats within your colony, how was it resolved?” Responses (n=5) are on par with literature review and primary data, indicating the fact that many times the issue can be resolved with education and flexibility, and also recognizing that there will be situations that do not get resolved in a win-win outcome.



Research Question 46 asked, “What are your suggestions for the City to consider as it looks at possible TNR programs?”. The replies indicated the need for more education about TNR in general as well as a need to address the cats in neighborhood or “domestic” situations. This is consistent with key informant interviews of both non-profits and the Animal Services Officers who all emphasized the need to connect the “neighborhood cat caregivers” with resources and education about the importance of spay/neuter. Two respondents also discussed the need to ensure disease transmission is addressed, with rabies specifically mentioned.

One respondent suggested that disease testing be included in the program. This last concern came up in much of the literature review as a public policy issue. In addition, as a participant observer, the researcher is aware of two different instances in the past 12 months where cats encountered through city nuisance investigation had health issues that had to be addressed. Of these, some were able to be treated; others had to be humanely euthanized. Both outcomes were costly to the City and the rescue group providing the treatment.

Questions 47 – 49 were removed after one response to reduce total questions. Thus the final question asked, “Please share any other comments or ideas you would like to share related to Citrus Heights Animal Services and the City’s prospective TNR programs specifically”.

The respondents (n=6) noted the following: continue to support the County’s TNR program (1 respondent); continue to support TNR, no euthanasia (1 respondent); find resolution within the regulations pertaining to catteries and colonies (1 respondent); appreciation for City ASOs, the need for a telephone network to call when need help, a caregiver meeting to share ideas and resources, as well as tips and training (1 respondent); and expand program beyond feral colonies to domestic situations where cats are dumped (1 respondent) and one respondent had a gibberish answer.

Survey Subgroup 3 – River City Cat Rescue (RCCR) Voucher Program Participant Data

The same survey sent to the SAAC voucher program users was also emailed to eight (8) RCCR voucher program users who had participated in the PetSmart Charities grant program which started September 1, 2013. Unfortunately, four (4) emails were rejected and only 2 of the 3 respondents completed the survey. Most of the lay participants in the RCCR vouchers did not provide email addresses on the voucher forms. Due to time constraints, the researcher was not able to contact the RCCR participants directly. Of some of the notable responses from the two respondents, the need to get the word out about available voucher programs and a recognition of the heavy burden carried by volunteer fosters to provide medical care to their charges were brought up for the City to consider as it works on program development.

Key Informant Interviews

The research study incorporated key informant interviews to help answer the Research Question of what should be included in comprehensive set of policy recommendations for the City to consider as a plan to cost-effectively manage its cat feral and stray cat populations. The interviews consisted of a series of questions in a semi-structured format. The format allowed for the researcher to ask clarifying questions and for the key informants to provide comprehensive responses.

Key informants included two jurisdictions in California recognized for successful TNR implementation, one of whom is a PetSmart Charities targeted spay/neuter grantee (similar to the City) and the other who has been able to implement TNR without the use of grant funds. Two local jurisdictions were also interviewed, selected to evaluate recent TNR efforts within each jurisdiction. The researcher also interviewed key informants with field and administrative experience with TNR in the region and specifically in Citrus Heights. Last, but not least, the researcher interviewed key informants within the City's animal services division to study the nuances of TNR challenges and opportunities within the City.

The interviews generally included the same questions and followed the same format. The researcher introduced herself and the purpose of the overall project. The researcher asked the key informants to share their history and background with animal services and with TNR specifically. The following discussion will compare and contrast key informant interview results along with an analysis of how the interview findings align with the literature review, survey results and participant observer data. All key informants interviews were recorded, except for one where the recorder was not properly turned on. Participants were advised when invited to

participate that their identities would be kept confidential. While not all key informants indicated a desire for anonymity, for the sake of consistency the interviews will be titled with letters and the participants by numbers.

Table of Key Informant Interviews

Interview	Key Informant No.	Interview Type	Date Completed
Upland	1	Phone	02/05/2014
San Jose	2 and 3	Phone	02/06/2014
Sacramento County	4, 5 and 6	In Person	02/07/2014
RCCR	7 and 8	In Person	02/07/2014
Elk Grove	9	In person	02/10/2014
SAAC	10	Phone; recorder failed (user error)	02/11/2014
CHAS Staff	11	In Person	02/11/2014
CHAS Staff	12	In Person	02/12/2014
CHAS Staff	13	In Person	02/13/2014
GSD Staff	14	In Person (not taped)	02/13/2014
GSD Staff	14 and 15	In Person (not taped)	02/18/2014

The Key Informant Interviews were designed to specifically address best practices for TNR programs and provide an opportunity for Citrus Heights to learn from others who have implemented TNR programs. The Research Sub-questions were incorporated into all interviews.

Research Sub Questions

- 1) Are TNR programs that use the community cat approach resulting in sustained decreased in nuisance cat issues in neighborhoods or areas where utilized?

- 2) What are the best practices that should be considered as required components and as ideal components for a successful TNR program?
- 3) What, if any, regulatory structures have been most effective to support successful TNR and/or community cat programs?
 - a. Do pet policies play a role in nuisance issues in multi-family communities.

Interview Question A: General background with animal control (asked of all key informants)

Most of the key informants indicated extensive experience with animal welfare and regulation with an average of 12-20 years for those working in the industry as well as the non-profits. The City's customer service staff interviewed had more limited experience levels, mostly obtained through their work with the City's animal services division within the past few years. Interestingly, the "volunteers" all were "tapped" to become involved in TNR from incidents where they came across a litter of kittens as part of their daily activities, and stepped up to take care of the kittens, including logical next steps related to spay-neuter.

This finding suggests that people tend to get involved with TNR out of their desire to help vulnerable kittens and stop more kittens from being born. Participant observer data affirms this from interactions with community members at large and with participants in the PetSmart Charities grant funded voucher programs in Citrus Heights. Many of the people actively trapping and funneling cats into spay-neuter services started out trying to help the cats and/or trying to address fact that cat populations were increasing and they wanted to do the "right thing" for the cats.

Interview Question B (i): The development of your feral/community cat program

(asked of all key informants)

In San Jose, the TNR movement started from a combination of an exposure to an innovation seminar that challenged participants to take an assumption and resolve to turn it around (euthanasia as the end game for feral cats) and personal experience in the euthanasia room putting an unending stream of healthy cats to “sleep”. Similar jumping off points occurred with Upland, Sacramento County and Elk Grove, with staff being exposed to the concept of TNR, usually through peer education within the animal welfare industry. All jurisdictions interviewed expressed a similar process to develop their own program after further research of successful municipal programs. Two key factors to starting TNR programs were the tangible and intangible costs to euthanize healthy cats in concert with the fact that nuisance issues and cat intake numbers continued to grow.

This is consistent with literature review findings from Handy (2001), Rogers (2009) and Aronson (2010) and aligns with assertions made by TNR advocates that point to increased live release rates and reduced nuisance issues as incentives to implement TNR. Survey results indicate similar starts to TNR, whether the catalyst was the cost and hassle to continue to trap and transport to the shelter (apartment managers and community members) or the costs charged to or absorbed by the jurisdiction the city for sheltering and euthanizing the majority of cats (Citrus Heights). Public demand by animal advocates and the general public has also been working together to “open the public policy window” to a degree that widespread public support is resulting in TNR programs gaining momentum.

Issues like “compassion fatigue” also are becoming more openly discussed, both from an organizational management and from a public awareness perspective. The impact on shelter staff required to euthanize healthy animals has tangible costs both in employee morale and mental health as well as to society. These facts are being aired more publically as TNR programs continue to evolve and shelters share the data with the public. This has led to additional public support for TNR programs.

Of note in at least one the listserv responses, decreased euthanasia rates are not solely the result of TNR programs. Participant observer and interview data supports this finding, recognizing that as TNR programs are being implemented, so too have major increases in energy, investment and outreach to support foster programs, adoption programs and public awareness campaigns. TNR is a critical component of reduced cat intake and euthanasia numbers, but all three components play a critical role.

Interview Question B (ii): Implementation – this question asked (1) whether nuisance cat complaints have decreased with TNR implementation and (2) what regulations and rules are utilized/recommended?

About Those Nuisances

For Upland, nuisance cat complaints have decreased, but do still exist. The point made in this interview was that there will always be people complaining about the cats, and that with TNR there is a recognition that the only thing that really works for the long term is TNR. This is a consistent theme through all the key informant interviews, with a common message to the public of “let’s try it” and “we will go from there”.

For San Jose, Sacramento County, Elk Grove and Citrus Heights, all jurisdictions report a reduction in nuisance issues. In Citrus Heights, the newest active TNR practitioner, all key informants (Key Informants 11-15) expressed a sense of reduced nuisance complaints, but more importantly noted the fact that the FREE TNR provides a viable option for complaining parties and cat caregivers, something which they can work with to help solve the problem.

This is consistent with findings from the literature review and from the limited survey responses from the Rental Property Management Company, where 4 respondents indicated ear-tipped cats returned to the property had reduced nuisance issues associated with them.

From the participant observer perspective, interaction with residents escalating nuisance calls to the supervisor has resulted in a willingness to “try” the TNR approach and go from there. This type of outcome is similarly reported in key informant interviews with the jurisdictions (key informants 1-9).

Regulation and Enforcement

Of all key informant interviews, only one jurisdiction reported using additional regulation and enforcement for TNR programs. In that jurisdiction, cat colonies are required to be registered but cats within the registered colonies do not have to be micro-chipped. Key Informant 13 also supported colony registration, asserting registered colonies have access to additional support and proactive intervention for issues that may arise. In contrast, Key Informant 12 opposed colony registration, citing a lack of real need for further tracking of colonies. It should be noted that in order to utilize the feral voucher program through SAAC, the colonies must provide contact information and also identify their colony with a name.

Key Informant 10 stated she is not aware of any particular regulation that is particularly supportive for TNR and noted that feral cat people tend to shy away from regulations. This was a common theme throughout the interviews, as well as in the listserv and the SAAC Feral Cat Colony Caregiver survey responses. Of note was one listserv respondent who reported the feral cat colony people wanted no part of the organization and even were detrimental to some degree. In the Caregiver surveys, the emphasis was on helping the caregivers versus enforcement tools. This was echoed multiple key informants, stressing the importance of working with the caregivers versus against them.

In contrast, multiple respondents to the Rental Property Manager survey want to see more active enforcement efforts aimed at addressing problem caregivers, and several recommended colonies be registered. Literature review revelations as well as all key informant interviews support the finding that in general feeding bans and other efforts geared toward stopping care of the cats or even moving colonies don't tend to work. Participant observer experience also support this general finding with the added note that people caring for feral cat colonies may face eviction and even be terminated from employment related to cat colony care, but will still take care of the colony. Several of the Key Informants added the fact that if caretakers feel the need to "go underground", they will do so, and often expose themselves to significant peril through trespass, difficult terrain or putting themselves in unsafe situations.

Interview Question B (iii) asked about lessons learned and in particular asked what are the critical components of a successful TNR program. Challenges and opportunities recognized and envisioned with TNR programs were usually covered in this section of the interviews.

For the City of Upland, year 2 of the two-year grant-funded TNR program saw cat intake numbers dropped by close to 500 cats and euthanasia numbers dropped by more than 50%. The key informant noted the importance of a comprehensive foster program to help save the lives of the kittens brought into the shelter, which otherwise may have been subject to euthanasia. Important considerations from the Upland program include targeting neighborhoods or communities for outreach where there are known nuisance cat issues.

All key informants agreed that there are places and situations where TNR may not be appropriate based on a number of factors. Some considerations include safety for the cats, environmentally sensitivity, and areas where the colony is better served by relocating. The latter is recommended as a last resort per Key Informant 10, as relocations tend to negatively impact the health and mortality of the relocated cats. The ASPCA also addresses situations where feral cat colonies should not be maintained, such as “ecologically sensitive areas”, areas where nuisance issues can’t be resolved or where there are legitimate safety concerns for the cats (<http://aspca.org>).

Upland did not cite any major implementation issues. The biggest implementation challenge for Upland was a resident concerned about impacts to birds. The point was made that cats being maintained will impact wildlife to a lesser degree than if a mother cat was hunting to feed her kittens. Additional challenges reported by key informants include ensuring consistent feeding in remote industrial areas and making sure to rise above organizational differences for the sake of the common goal to save lives and reduce nuisance issues. The interplay between the various stakeholders, even when on the “same side” came up in some of the listserv responses as

well as in the literature review. As noted by Kortis (2007), bashing each other serves no purpose and serves those with the most to lose (cats, wildlife, and people) least of all.

Upland emphasized the need for organizational buy-in and ensuring staff understand program benefits and can relay the message in a way to convince the public that TNR is the only way to have a lasting impact on the problem of cats coming into the shelter. The simplicity of the program was also noted as a critical component.

Core components for successful TNR programs identified within the key informant interviews included consistency, organizational buy-in and consistent, confident messaging to the public about the benefits of TNR (Upland, San Jose, Sacramento County, Elk Grove). Other elements to consider, not necessarily identified by all key informants, were the need to be flexible to the needs of the community, to be committed to the program for the long haul, to ensure that the TNR program is easy for the participants and include some type of trap-lending process.

Several Key Informants (San Jose and Sacramento) expressed the opinion that a TNR program should not be a matter of public debate prior to implementation. These Key Informants suggested starting with pilot projects and working toward more formal programs. In Elk Grove, an extensive public outreach and education process occurred prior to implementing the TNR program, resulting in “overwhelming” community support for the program. Key Informant 9 also stopped picking up trapped cats, putting the onus on the citizen to take the cats to the shelter and have a direct link to the resulting euthanasia if TNR not utilized. The salient point from this discussion is the importance of knowing your own community, its expectations and tolerance levels and those of the elected officials.

Some challenges noted from the key informants working in the field include the challenge of finding feeders who are feeding in open spaces and creek areas, and then sometimes getting the feeders to be partners in the TNR efforts versus sabotaging the trapping operation. This speaks to the feral cat caregiver perception that animal control will take the cats and kill them versus bringing them back after being sterilized (Key Informants 7, 8 and 13). Key Informants from CHAS also indicated a need to hold problem people accountable, particularly if all other avenues have been exhausted.

Issues associated with disease transmission and parasites issues were discussed in Key Informant interviews with RCCR and CHAS. All expressed the importance of being vigilant about disease and parasite control, and both groups reported experiences with ringworm in two different colonies. A positive from the TNR process is that ringworm was caught in both cases and the spread halted. Key Informants 7 and 8 noted that they used to do testing in all their colonies, but now are much more strategic, only testing when it looks like there may be a health issue with a cat or cats. It should be noted the various grant programs typically only cover surgery costs, with rabies vaccinations sometimes included.

All key informants affirmed the fact that there will always be people opposed to the program, recognizing there would be some opposition to TNR regardless of what process it takes to implement.

Ear-tipping was in effect for feral colony cats in most jurisdictions, but not all and whether or not the stray “community cats” are ear-tipped varies throughout the key informant jurisdictions. The degree to which ear-tipping is utilized also varies in the literature review, with the practice being recommended and commonly accepted as a best practice for all cats in feral

colonies. The rationale is to recognize those cats already altered and thus focus on TNR for non-tipped cats.

Interview Questions C and D, related to working with the caregivers and community, ended up being covered in Interview Question B.

While much of the Key Informant interviews covered this topic earlier in the interview questions, Key Informant 10 (SAAC) offered insights about this topic that appear to be somewhat unique to the Sacramento region. One of the clear advantages associated with TNR program implementation in the region and in particular in Citrus Heights is the strong collaboration between the three main shelters (Sacramento County, Sacramento City and the Sacramento SPCA). These shelters work together to leverage resources and provide spay-neuter surgeries for feral and stray cats. The SPCA offers low cost feral cat sterilization clinics on the first 4 Sundays of every month, and has flexibility to schedule large volumes in the case of a planned big trapping event.

The Sacramento Area Animal Coalition (SAAC) is another local resource that while not entirely unique to Sacramento in form or function, SAAC type voucher programs are not widely available either. The SAAC group provides a structure for collaboration with multiple veterinarians to provide local spay-neuter services throughout the community. The program is simple and transparent, with all vets participating at a pre-set contracted surgery rates. It also allows the various jurisdictions and non-profits to contribute to low or no cost spay/neuter programs and to track outcomes by zip code and animal type. This allows jurisdictions to partner with SAAC and have very little administrative burden.

As pointed out by a local listserv survey response, the local cat group Sac Ferals does the outreach for their feral cat program, another benefit to the collaborative relationships within the Sacramento region. Citrus Heights has the added benefit of three local veterinarians and one just outside the City limits that are active in the SAAC and RCCR voucher programs. This is a tremendous opportunity for a higher level of TNR to occur due to the convenience factor.

A final note Key Informant 10 shared regarding the Sacramento region is that in this area, the municipal support is in place. Most local jurisdictions have contributed or contribute on a regular basis to the SAAC voucher programs. KI 10 noted this was not always the case and the support provides a consistency to the program that contributes to its continued success. From the participant observer perspective, the wide-spread municipal support also allows the SAAC program to have name-recognition throughout the region, a centralized location for resource sharing. There is also the SAAC listserv, which mainly acts as a email outlet for the various shelters, rescues, colony caregivers and animal welfare groups to seek assistance with animal transport, rescue activities, TNR help, lost and found information and general animal-related communal support.

Interview Question E asked about the key informants' experience and recommendations related to mandatory micro-chipping.

Micro-chipping did not seem to be a consistent theme among the survey respondents, the key informant interviews or the literature review. The researcher opinion, which is upheld by the data, is that if micro-chips are available, the best application is for owned cats in order to build recognition the cat is owned and not something “disposable” and to return owned cats to their

owners, especially in areas with high tenancy turnovers. Key Informant 11 opined that all cats should be micro-chipped and multi-family communities should be an early target for outreach.

Key Informants 12 and 13 support lifetime cat registration with micro-chip included. Key Informant 12 recommended that free sterilization be included in the lifetime registration as well, a recommendation that was also made by Key Informants 7 and 8, representatives of a local rescue group.

Interview Question F asked the key informants to share any other insights or areas where he City should look further.

Next steps recommended by the Key Informant 10 (SAAC) include the need to reach out to the folks who may not even know they are caregivers, the ones who may have 1-5 cats they are feeding and who don't know the resources are there or where they can turn to. This was also cited in the Upland key informant interview, with Key Informant 1 discussing the fact that many people are feeding the stray cats of the neighborhood, but do not associate "ownership" with the act. In reality however, the cat or cats are likely depend on that person's care. Similar observations were made in the literature review, such as Kortis (2007, 2013) and Holz (2013).

The need to ensure program information is easily accessible was also cited as a critical next step, with Key Informant 10 noting that many voucher program users stumble upon the program when doing internet searches for assistance, versus learning about it from marketing or public education. Participant Observer and Citrus Heights Key Informant interviews support this assumption, with most of Citrus Heights new voucher program beneficiaries learning about the program after reporting issues or being the subject of nuisance complaints.

Key Informant 9 stressed the importance of transparency about the outcomes of feral cats without TNR and the need to know the characteristics of the neighborhoods to enable successful and proactive TNR implementation that fits within that community. Key informant 11 also discussed the need to be sensitive to the characteristics of each colony.

Key Informant 9 also talked about the need to build relationships within the veterinary community, a common recommendation in the literature about best practices. The importance of participation from the veterinary community was also stressed by key informants 10, 12, 13, and noted from the participant observer's experience.

Final comments from San Jose included the importance of being fully committed to the program for the long haul, a point also made by several other key informants. Elk Grove shared the participant observer's concern about long term program funding, noting they are already looking for other possible grant or other funding mechanisms to support the program. Locally, all jurisdictions providing free surgeries for feral and free-roaming cats are funded all or in part by grant funds. The issue of long-term funding was identified by several key informants, particularly 7 – 14, most of whom are only able to promote TNR at its current level with the current PetSmart Charities grant support. The issue of continued and long term funding warrants additional research and planning as part of the next steps of this study.

Key Informant 11 and 13 recommended the City work on targeted education and TNR in apartment and mobile home communities. Key informant 12 cautioned the City to be proactive, but careful and methodical relative to commitment of staff resources to provide field support to the program.

Significant Findings

The survey data and key informant data provided significant insight relative to TNR program best practices, lessons learned, opportunities within the Citrus Heights area and potential issues to watch for. The study set to determine if TNR programs that use the community cat approach have sustained decreases in nuisance complaints, what core best practices should be included in a successful TNR program, and what if any regulatory structures have been most effective to support successful TNR and/or community cat programs.

Neither the surveys nor the majority of the jurisdictional key informant interviews resulted in significant findings regarding ways to address health and nuisance issues. However, each of the four (4) jurisdictional key informant interviews as well as the City animal services staff report a reduction in nuisance cat complaints. For City staff, the most important element is the ability of offer “options” to the cat feeder as well as the neighbor/s affected by nuisance issues. Thus the low and no cost spay/neuter surgeries are critical.

In the literature review, the point was repeatedly made that TNR is the only humane method that really works to address cat overpopulation issues. The emphasis from the literature review and through the key informant interviews was more along the lines of minimizing nuisance outcomes and health risk exposures, particularly associated with zoonotic diseases. The key informant interviews with field staff and volunteers presented a different perspective however. Consistent with some of the TNR opposition literature assertions, zoonotic diseases and nuisance impacts are more prevalent with concentrated cat populations that have a lower level of preventive care such as vaccinations, flea treatment, deworming, etc. These are realities that a City program needs to recognize and address within its TNR recommendations.

Relative to the regulatory environment, most survey and key informants recommended utilizing existing ordinances and making TNR supportive exception where appropriate versus developing TNR specific regulations. This was not the case much in the literature review, which did include best practice ordinance and participation guideline recommendations. Most dealt with goals aimed toward community empowerment, program transparency and caregiver accountability. The importance to minimize risk for the various organizations was also stressed. Not surprisingly, the two data groups that did support increased enforcement included the apartment manager survey group, the non-profit rescue group and several of the animal services staff. These stakeholders support the idea of working with caregivers to arrive at workable problem resolution, but want to see more accountability when caregivers refuse to participate in the solution. This is an expected finding because the rescue groups and animal services staff are the ones trying to work out neighborhood solutions in the field. Often, the persons affected by cat nuisance impacts are extremely frustrated that cat feeders are not subject to adequate enforcement or nuisance abatement orders.

A final significant finding relates to the societal cost of “disposable” cats. It is clear from the key informant interviews that animal shelters are moving steadily toward increasing TNR programs as one of several key strategies to reduce cat overpopulation and associated impacts. It is also evident that TNR is not the “silver bullet” and must be thoughtfully balanced with environmental and quality of life considerations. Thus, additional best practices offered in the literature review are critical. Practices that centered on community education, targeted spay-neuter efforts in multifamily communities and empowering community members to be actively involved were consistently supported within the primary data.

To summarize this chapter, an extensive data analysis was performed, comparing and contrasting revelations from the literature review with primary and secondary data provided through the research. Overall findings were generally consistent with researcher expectations and include a number of core elements for the City to consider as it implements TNR within the community. There were also a few surprises encountered within the study, including an extensive TNR collaborative infrastructure within the Sacramento area that is not available in many other regions struggling to deal with similar issues.

Another unexpected finding is that Citrus Heights has a tremendous benefit in its local veterinary community because three (3) of the six (6) veterinary clinics providing subsidized feral cat spay/neuter surgeries are located within the City or just outside the limits. Another benefit for the City is the number of local veterinarians participating in the spay/neuter voucher programs operated by two Sacramento area non-profits. These findings are extremely advantageous for the City as it looks at implementing TNR.

Chapter 5 – Conclusions, Recommendations and Next Steps

The researcher examined the practice of Trap-Neuter-Return (TNR) programs implemented to manage feral and stray cat populations in order to develop a series of recommendations and next steps for the City to consider for its municipal cat management program. The public policy issues prompting this study include escalating animal sheltering costs, community quality of life and nuisance issues, health-related impacts from free-roaming cats, and the need for effective, humane feral and stray cat management policies.

A case management format was utilized for the study, including three (3) survey-questionnaires administered to animal welfare public administrators, multi-family rental property managers in Citrus Heights and feral cat colony caregivers within the City. Key informant interviews were conducted, with participants selected based on expertise and direct experience with issues and opportunities likely to be or actually encountered in the subject city. The researcher relied on primary and secondary data available from the City as well participant observer data in the form of field notes. This methodology provided study validity in the form of data triangulation.

Conclusions

There are several key conclusions resulting from this study. The purpose of this case study was to develop a comprehensive set of policy recommendations for cost-effective cat management. The researcher can confidently conclude that there are specific core components of a TNR program that must exist for sustained success. Ongoing funding for subsidized spay/neuter surgeries, extensive collaboration with animal welfare groups and veterinary service providers, community empowerment and accountability, community education and marketing and record keeping are all essential “best practice” ingredients to be included in the City’s TNR implementation plan.

The research sub-question of whether TNR programs that utilize the community cat approach are resulting in reeducated nuisance complaints is partially affirmed. In areas where one or more caretakers sabotage TNR efforts or refuse to commit to sterilization of the entire colony, problems persist. In these cases, both lay and professional animal welfare advocates become extremely frustrated. Because these are the cases that generally garner media and City

official attention, the negative impact to a TNR program can be significant. Thus it is critical to ensure caregiver accountability and to implement enforcement actions where appropriate. This will build community support as well as demonstrate a fair and transparent process to the public.

The final research sub-question concerned what, if any, regulatory structures have been most effective to support successful TNR and/or community cat programs. In general, the this study finds that there is consensus to strengthen existing regulations and enact exceptions that are supportive of responsible TNR efforts or at least do not hinder success. In addition, there is a clear need to provide caregivers with access to information, education, training and trapping resources. The researcher recommends leveraging the extensive network within the Sacramento region to facilitate this support for Citrus Heights resident caregivers. This type of collaborative approach will reduce the need for enforcement measure through community empowerment, thus freeing up staff resources to focus on enforcement where it is unavoidable. Based on the findings and conclusions of the study, a series of Specific, Measurable, Attainable, Realistic and Time-based (SMART) goals have been developed for presentation to the City.

Recommendations

A SMART approach to for the City's TNR program implementation is highly recommended. The following discussion outlines next steps using (SMART) objectives. Following the plan will allow the City to achieve fiscally responsible and community outcomes related to feral and stray cat management.

*Community Outreach and Education***Recommendation 1: Community Outreach and Education**

By June 30, 2014, the Animal Services TNR specialist will provide an assessment of cat conditions, community education and facilitate free spay/neuter voucher assistance to fifteen (15) multi-family communities.

The first set of recommendations are a high priority due to the pending onset of kitten season, which typically starts in spring and continues through late fall. A first priority will be to follow up with multi-family property managers and tenants to educate them about the need to ensure all free-roaming cats are spayed and neutered. This process started in September of 2013 with animal services staff outreach. All multi-family communities should be contacted in writing in March 2014 with site-specific follow up by staff March – June 2014. Staff should also revisit local veterinary clinics to develop additional partnerships in the areas of low cost spay/neuter surgeries as well as micro-chipping clinics.

Recommendation 2: Community Outreach and Education

By October 31, 2014 the Animal Services Program Assistant will schedule and the Animal Services Officers and Animal Services Supervisor will each conduct a minimum of two (2) community education sessions for a total of six (2) presentations by October 31, 2014.

The City has very limited staff resources to assist residents with actual trapping services. Thus, any opportunity to empower community members to solve problems will be beneficial. Areas where staff may need to focus attention will be public education about available low or no cost spay/neuter programs and connecting caregivers with the resources needed to complete TNR

efforts in target areas. It will also be important to respect the interests of property owners negatively impacted by nuisance cat issues and ensure citizens contributing to nuisance issues are held accountable.

Organizational buy-in and shared understanding of program tenets are also essential for a TNR program success. The employees need to understand and believe in TNR rationale. Key comments from key informants, “It is the only thing that really works” and “Your only regret is going to be that you didn’t do it sooner” reflect the type of organizational attitude desired for optimal efficacy. Ensuring trappers and caregivers have access to traps, training, medical treatment, transportation and access to veterinary clinics in a timely fashion is also important, along with education for the caregivers as well as the community at-large. These elements will be important as community outreach and education is developed and implemented.

Funding

Recommendation 3: TNR Funding

By August 31, 2014, the Animal Services Supervisor will research, develop and present two – three (2-3) ongoing funding options to the General Services Director for consideration.

Recommendation 4: TNR Funding

By October 31, 2014, the Animal Services Program Assistant will identify and coordinate participation in two (2) fundraisers to support spay/neuter subsidies.

Funding is probably most important consideration for a municipal animal management program and especially related to cats, which have historically been a relatively low priority for

jurisdictions and society in general. Only one of the jurisdictions included in the study does not rely on grant funds for TNR and most rely extensively on non-profits and animal welfare groups.

Staff will be able to use the results of this study to advocate for additional grant resources to support staff involvement in TNR efforts. The City's current PetSmart Charities grant provides funds for approximately five (5) hours a week of dedicated staff time for TNR work. This has been a critical component of success with the local veterinarians, the neighborhoods and the trappers. The City should consider partnering with one or two other jurisdictions to apply for a regional grant based on the pilot TNR model currently in effect with RCCR, dedicated ASO time and veterinary clinic partners. A grant application should be developed within the next six months and submitted to prospective funding organizations by October 30, 2014. This timeline is recommended to ensure funding continues beyond the September 30, 2015 end of the current PetSmart Charities grant term.

TNR Pilot Project

Recommendation 5: TNR Pilot Project

By August 30, 2015 the Animal Services Supervisor will ensure that nearly 2200 cats have been spayed or neutered through PetSmart Charities grant funding.

A pilot project approach is one of the first key recommendations for TNR implementation. This will allow the City to be flexible to neighborhood needs and fine-tune programmatic functions. Collaboration with caregivers and community members is another core element, keeping the goal of win-win solutions at the foreground of building and maintaining relationships. Understanding the neighborhoods and tolerance levels within them is important to

any TNR program, but especially so in Citrus Heights, where the City's commitment to quality of life is a high priority. Staff will need to promote TNR practices that minimize disease and parasite transmission, particularly zoonotic conditions.

Areas for Further Study

There are two main areas elicited from the study that demonstrate a need for additional study. The most important opportunity is the creation a lifetime registration for cats including micro-chipping and possibly a spay-neuter component. The researcher talked with several key informants about this idea developed within several stakeholder interviews. The City could start by contacting Calgary, Canada about its lifetime cat registration program and develop an implementation framework and seek grant funds for a "demonstration project".

Alternative funding sources is another area the researcher recommends for further study. The City should identify various non-profits supporting animal welfare in the region and explore formation of a "friends of Citrus Heights animals" non-profit or partner with an existing regional non-profit for funding to support spay/neuter and other animal-related programs.

Final Comments

This study has resulted in a series of recommendations that are presented in SMART format to ensure the City achieves fiscal goals in line with community values. The researcher provided specific strategies to achieve the goals to address stray and feral cat population issues within the City by proactively implementing TNR programs as appropriate to each circumstance and neighborhood. Implementation of the recommendations as outlined will result in outcomes the City can measure in terms of reduced cat nuisance issues, City costs and shelter intake

numbers. The plan takes into account the resources currently available within the City's animal services unit to ensure each component is achievable and reasonable to accomplish in the identified timeframes. The recommendations are also prioritized, with specific suggestions relative to where to start first and where to combine efforts for maximum effectiveness. Finally, areas for further study are suggested, provided for maximum impact over the next two years. Thus, as a result of this study, the City has a comprehensive set of SMART policy and program objectives to enable success with TNR in Citrus Heights.

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Appendices

1 - Blank Version of Survey Questionnaires

A-1: Listserv Survey for Subgroup No. 1: ICMA, League of California Cities and SAWA

A-2: Rental Property Manager Survey for Subgroup No. 2: Citrus Heights Area Multi-family Partners (CHAMP) and Citrus Heights Apartment Managers

A-3: Colony Caregiver Survey for Subgroup No. 3: Citrus Heights Colony Caregiver Participants in the Sacramento Area Animal Coalition (SAAC)

2 – Key Informant Interview Guiding Questions

A – Jurisdiction Interview Guiding Questions

B – Non-profit Key Informant Guiding Questions

C – Citrus Heights Animal Services Staff Guiding Questions

Listserv Survey

Page One

Hello. My name is Mary Poole and I am the Operations Manager for the City of Citrus Heights General Services Department. One of my key responsibilities is the Animal Services Division. I am currently completing my graduate degree in Public Administration and am conducting a research study on best practices related to feral and stray cat management. I am focusing on TNR programs and would appreciate your responses to the following questions. I will be happy to provide a summary of the results upon request. Please Note: This survey is confidential and your responses and contact information will be kept strictly anonymous. The information provided will be used to develop recommendations for the City's TNR programs. Thank you so much for your assistance!

1. Organization Name:

2. Respondent Department/Division:

3. What is the population of your jurisdiction?

4. How many square miles in your jurisdiction?

5. Name of Animal Shelter:

6. Do you operate an animal shelter or contract out for shelter services? If shelter services are contracted out, please indicate the service provider.

New Page

These next few questions are related to Trap-Neuter-Return (TNR) programs. TNR programs generally consist of trapping unowned feral or stray cats, providing spay/neuter and usually a rabies vaccination (often other vaccinations as well), and returning the cat to the area from which it was trapped.

7. Does your organization have a Trap-Neuter-Return (TNR) program?

☐ Yes

☐ No

8. Does the program support feral cats only or feral and stray cats?

- ☐ Feral cats only
- ☐ Stray cats only
- ☐ Feral and stray cats
- ☐ Other

9. How long has the TNR program been in place (in years)?

- ☐ Less than one year
- ☐ 1-2 years
- ☐ 3-4 years
- ☐ 5-6 years
- ☐ More than 6 years
- ☐ Other

10. Do you require cat colonies to be registered with the agency or with a third party?

- ☐ All cat colonies are required to be registered with the agency.
- ☐ All cat colonies are required to be registered with a third-party non-profit.
- ☐ All cat colonies are required to be registered with the Shelter.
- ☐ Cat colonies are not required to be registered.
- ☐ Other

11. Do you require cat colony caregivers to be registered/permitted?

- ☐ Cat colony caregivers must be registered with the agency.
- ☐ Cat colony caregivers must be registered with the shelter.
- ☐ Cat colony caregivers must be registered with a third-party.
- ☐ Cat colony caregivers do not need to be registered.
- ☐ Other

12. Has your organization adopted the Community Cat model of TNR? (Typically includes un-owned friendly strays and/or feral or semi-feral cats that are provided with no/low cost spay/neuter surgeries and rabies vaccinations and returned to the area they came from).

- ☐ Yes
- ☐ No
- ☐ Other

13. As a result of TNR programs, have your cat shelter intake numbers gone down?

- ☐ Yes
- ☐ No
- ☐ Other

14. If so, by approximately how much (percentage) over what timeline?

15. As a result of TNR programs, have your euthanasia numbers for cats gone down? Please add details if desired.

16. If so, by approximately how much (percentage) over what time line?

This next section is related to funding TNR programs. Please feel free to use the comment boxes to share additional insights or suggestions.

17. How does your organization fund TNR programs? (Please check all that apply).

- ☐ General fund
- ☐ Grant funds
- ☐ Donations
- ☐ License Differentials
- ☐ Fees assessed on unaltered impounds
- ☐ Other

Comments

18. Does your organization rely on grant funds for TNR programs?

- ☐ Yes
- ☐ No
- ☐ Other

Comments

19. If so, please check the grant sources that have supported TNR program for your organization or your community in the past and/or currently.

☐ Grants from your organization

☐ ASPA

☐ HSUS

☐ Maddie's Fund

☐ PetSmart Charities

☐ SPCA

☐ Other

Comments

20. If your organization currently relies completely or heavily on grant funds, how will TNR operations be funded if grant funds are not available in the future?

Comments

The next section is related to structure and staffing of your organization's TNR program. Please feel free to use the comment boxes to provide additional information or insights.

21. How many Full Time Equivalent (FTE) staff persons are utilized to operate your TNR Program?

Comments

22. How many volunteers support your TNR program?

- ☐ 0
- ☐ 1
- ☐ 2
- ☐ 3
- ☐ 4
- ☐ 5
- ☐ 6
- ☐ 7
- ☐ 8
- ☐ 9
- ☐ 10
- ☐ 11-15
- ☐ 16-20
- ☐ More than 20
- ☐ Other

Comments

23. How many volunteers, if any, assist with trapping?

Comments

24. How many volunteers, if any, assist with transportation from trap site to vet/shelter and back to site?

Comments

25. How many volunteers, if any, assist with public education?

Comments

26. How many volunteers, if any, assist with other activities, such as tracking, monitoring active TNR sites, providing training to new volunteers, etc. Please briefly describe the activities.

Comments

27. Do you contract through a third-party to provide voucher services for no or low-cost spay/neuter surgeries? If so, please list a few pros and cons of the program.

Comments

28. What practice or program is the most effective in your jurisdiction to manage feral and stray cat populations?

- ☐ Low Cost Spay/Neuter voucher program for low income residents
- ☐ Active TNR programs utilizing staff and volunteers
- ☐ Clear regulations with enforcement
- ☐ licensing or micro-chipping mandates
- ☐ All of the above
- ☐ Our jurisdiction does not really have cat overpopulation or nuisance issues

Comments

New Page

This last section has to do with the regulatory structure of your jurisdiction's cat management practices. Again, there are comment boxes after each question for additional insights, caveats or suggestions.

29. Do you require cat licensing for owned cats?

- ☐ Yes
- ☐ No
- ☐ Other

Comments

30. Do you require licensing for feral, stray or community cats?

☐ Yes

☐ No

☐ Other

Comments

31. Do you require microchipping for owned cats?

☐ Yes

☐ No

☐ Other

Comments

32. Do you require cats to be micro-chipped? Please check all that apply.

- ☐ Yes - owned only
- ☐ Yes - owned and TNR
- ☐ Yes - TNR only
- ☐ Yes - only for cats adopted through the organization's adoption programs
- ☐ We do not require micro-chipping for cats at all
- ☐ Other

Comments

33. Does your municipality have ordinances in place to regulate TNR programs?

- ☐ Yes
- ☐ No
- ☐ Other

Comments

34. If yes, please indicate the types of regulatory requirements under your TNR program. Please check all that apply.

- ☐ Ear Tipping required for all TNR cats
- ☐ Micro-chipping required for all TNR cats
- ☐ Feral cat colony registration
- ☐ Cat/wildlife feeding ban unless operating under a registered or approved colony or with a permit
- ☐ Permit required for trapping cats
- ☐ Colony caregiver required to take all reasonably likely to result in a 90-100% sterilization rate
- ☐ Colony caregiver required to notify jurisdiction if unable to reasonably trap a final number of cats within a colony
- ☐ Prohibition of unaltered cats to roam off owner's property
- ☐ Authorization to TNR any unaltered cats found roaming off owner's property
- ☐ Prohibition of trapping cats in registered colonies by anyone other than registered caretaker, animal control officer or designated agent of animal control.
- ☐ Other

Comments

35. If yes to Question 33, are rules and guidelines strictly enforced?

Comments

36. What types of enforcement for violation of TNR program rules and regulations are utilized within your organization?

- ☐ Revocation of colony registration/permit
- ☐ Administrative citation with opportunity to correct
- ☐ Administrative citation with monetary penalties
- ☐ Infraction citation
- ☐ Misdemeanor citation
- ☐ Citation for neglect or abandonment
- ☐ Citation for neglect if fail to alter between 90-100% of colony cats within a prescribed period of time
- ☐ Other (please explain in the text box below).

Comments

Thank You!

Thank you for taking the time to fill out this survey and respond to the questions. Your input is very important to this study. Should you wish to provide additional feedback, please feel free to email the researcher directly at mpoole@citrusheights.net or call her directly at (916) 727-4730.

Rental Property Management Survey - Feral/Community Cat Research Study

Page One

Hello. My name is Mary Poole and I am a graduate student at Golden Gate University in San Francisco. I am also responsible for the Animal Services Division for the City of Citrus Heights. I am conducting a research study on Trap-Neuter-Return (TNR) programs in the City and would really appreciate your input to assist me with the research study. Your individual responses will be kept confidential and your name and the property/ies you manage will NOT be referenced within the study. The purpose of this study is to: 1) collect real life experience information from rental property managers who have experienced issues with stray and/or feral cats within the property/ies they manage and 2) collect information from property managers related to what strategies are working/not working to manage the cat populations and what the City could do different or better to provide support to the property management efforts. Please feel free to use the comment boxes to provide additional information. If no additional comments are provided, the survey will likely take about 10 minutes to complete. Thank you - your input is critical to the success of the study!

Questions 1-3 have to do with basic property management characteristics of your properties.

1. Are you a rental property manager or do you perform property management functions within the City of Citrus Heights.

☐ Yes

☐ No

Comments

2. Which of the following best describes the property/ies you manage? (Please select all that apply)

- ☐ Multi-family apartment homes
- ☐ Multi-family condominiums
- ☐ Mobile home community
- ☐ Single family homes and or duplexes
- ☐ Four-plexes
- ☐ Senior apartments
- ☐ Other (please briefly describe in the COMMENTS box

Comments

- ☐ Open space (field or park space)
- ☐ Main arterial road
- ☐ Smaller local road
- ☐ Retail
- ☐ Commercial - industrial
- ☐ Other (please describe in the OTHER or COMMENT box
- ☐ Other

4. Do you allow owned cats at your properties?

☐ Yes

☐ No

☐ Other

Comments

5. Do you have a pet policy? If no, please skip to question 16.

☐ Yes

☐ No

☐ Other

Comments

6. If yes, does it apply to both dogs and cats?

☐ Yes

☐ No

☐ Other

7. If so, is there a pet deposit required for cats?

☐ Yes

☐ No

☐ Other

Comments

8. If so, what is the monthly amount?

Comments

9. If cats are allowed, how many are allowed per unit?

☐ 1

☐ 2

☐ 3

☐ 4

☐ There is no set limit

☐ Other

10. If you allow cats, are they required to kept inside?

☐ Yes

☐ No

☐ Other

Comments

11. If a pet policy is utilized, are tenants required to show proof of license as part of the leasing process?

☐ Yes

☐ No

☐ Other

Comments

12. If a pet policy is utilized, are tenants required to show proof of license as part of the lease RENEWAL process?

☐ Yes

☐ No

☐ Other

Comments

13. 13. If a pet policy is utilized, are tenants required to show proof of rabies vaccination as part of the leasing process?

☐ Yes

☐ No

☐ Other

Comments

14. 13. If a pet policy is utilized, are tenants required to show proof of spay/neuter as part of the leasing process?

☐ Yes

☐ No

☐ Other

15. Do you require tenants to show proof of current pet license as part of the lease renewal process?

☐ Yes

☐ No

Comments

This next section relates to your experience with feral and/or stray cats. If you do not have any feral or stray cats on property you manage, please skip to Question 33 (very close to the end of the survey).

16. Do you have feral and/or stray cats on your rental property/ies? If you do not have feral or stray cats on your property, PLEASE SKIP TO QUESTION 34.

☐ Yes

☐ No

☐ Other

Comments

17. What is the estimated number of feral and/or stray cats at your property/ies?

Comments

18. If there are feral and/or stray cats living within your rental property/ies, is there one or more tenants feeding the cats?

☐ Yes

☐ No

☐ Other

Comments

19. If so, are the cats being spayed and neutered as part of the tenant care of the cats?

- ☐ Yes
- ☐ No
- ☐ Don't know
- ☐ Other

Comments

20. If there are tenants feeding feral and/or stray cats on your rental property/ies, are they feeding responsibly (feeding in the morning and removing cat food after feeding to avoid nuisance issues such as skunks and other wildlife).

- ☐ Yes
- ☐ No
- ☐ I don't know
- ☐ Other

Comments

21. If you have one or more feeders, do they feed and provide care for the cats with your approval? Please provide additional comments in the comment box if desired.

☐ Yes

☐ No

☐ Other

Comments

22. If there are feral and/or stray cats on your rental property/ies, are they spayed or neutered?

☐ They are all altered (spayed or neutered)

☐ There are a few that are not altered

☐ Most if not all are not altered

☐ I am not sure if they are altered

☐ Other

Comments

23. If there are unaltered cats on your property, please indicate the reason/s. Please select all that apply.

- ☐ Tenants just feed and do not follow up to spay or neuter
- ☐ Cats are abandoned by tenants and have never been caught
- ☐ We are unable to catch
- ☐ Other (please explain in OTHER or COMMENTS box)
- ☐ Other

Comments

24. Do you receive complaints about feral and/or stray cat nuisance issues? Please select all that apply/

- ☐ Male cats spraying urine
- ☐ Cat feces in landscaping
- ☐ Cat feces in children's play areas
- ☐ Cats fighting
- ☐ Cats mating
- ☐ Cats fighting with owned cats
- ☐ Cats spreading sickness
- ☐ Cats scratching or biting people
- ☐ Other (please explain in OTHER or COMMENT box)
- ☐ Other

Comments

25. Have you or your staff trapped feral and/or stray cats and taken them to the County Animal Shelter or an SPCA?

- ☐ Yes
- ☐ No
- ☐ Other

Comments

26. Have you or your staff utilized the City's animal control staff to pick up trapped cats and take to the Animal Shelter for a \$20 per cat pick up fee?

- ☐ Yes
- ☐ No
- ☐ Don't know
- ☐ Other

Comments

27. If either answer to the previous two question was yes, approximately how many cats per year have been trapped and taken to shelters? Please feel free to add additional details in the COMMENT box.

Comments

28. Do cats get dumped or left on your rental property/ies on a regular basis?

- ☐ Yes
- ☐ No
- ☐ Don't know
- ☐ Other

Comments

29. If so, how big of a problem would you consider it to be?

- ☐ Major problem
- ☐ Moderate problem
- ☐ Slight Problem
- ☐ Neutral
- ☐ Not a problem
- ☐ Other

Comments

30. If cats went to the County Animal Shelter during the past year, were they returned (after being spayed and/or neutered, vaccinated and ear-tipped)? Ear tipping is the practice of notching a cat's ear to show that it has been spayed or neutered. It is frequently used with feral cats.

☐ Yes

☐ No

☐ Other

Comments

31. If so, have the ear-tipped cats become less of a problem relative to nuisance issues?

☐ Yes

☐ No

☐ Somewhat

☐ Don't know

☐ Other

Comments

32. Are you aware of the City's PetSmart Charities grant that provides FREE spay/neuter surgeries and rabies vaccinations for Citrus Heights cats through the Sacramento Area Animal Coalition (SAAC) and River City Cat Rescue (RCCR)?

☐ Yes

☐ No

☐ Other

Comments

33. did you know that owned cats are required to have a City pet license and current rabies vaccinations?

☐ Yes

☐ No

☐ Other

Comments

34. What to you think are the biggest barriers keeping tenants from licensing their pets? Please check all that apply.

- ☐ Tenants don't know about licensing requirements
- ☐ Tenants don't care about licensing requirements
- ☐ The cost is considered too much (\$15/year for pets that are spayed or neutered and \$30/year for intact pets)
- ☐ It is not easy or convenient for people to license their pets
- ☐ Tenants don't know how to license their pets
- ☐ There are language or cultural barriers
- ☐ Other (Please explain in OTHER or COMMENT box)
- ☐ Other

Comments

35. What do you think the City should consider doing to support responsible Trap-Neuter-Return (TNR) efforts for feral and/or stray community cats? Please select all that apply.

- ☐ Enact ordinances requiring colonies to be registered with the City
- ☐ Require cats in government or grant funded TNR programs to be microchipped
- ☐ Require colony caretakers to ensure 90-100% of cats within colony are altered (spayed or neutered)
- ☐ Issue citations to cat feeders or colony caretakers who foster nuisances by refusing to do TNR or feeding in such a way to attract nuisance wildlife

Comments

This final section provides an opportunity for you to provide additional comments or suggestions. If you would like to have Citrus Heights Animal Services follow up with you, please reply to the email instead of putting contact information in the survey response. The survey responses are strictly confidential and keeping your contact information out of the responses assures your ability to respond anonymously.

36. Any comments or ideas you would like to share related to Citrus Heights Animal Services in general and/or cat issues and Trap-Neuter-Return (TNR) efforts specifically?

Comments

Thank You!

Thank you for participating in this research study. Your responses will remain confidential and will be included in a general summary that is provided to the City to consider as part of the City's cat management strategy development. Thank you so much for your input! Should you have additional comments or questions, please feel free to contact the researcher at mpoole@citrusheights.net or (916) 727-47 30.

Citrus Heights PetSmart Charities Voucher Program Survey - RCCR

Page One

Hello. My name is Mary Poole and I am a graduate student at Golden Gate University in San Francisco. I am conducting a research study on the Trap-Neuter-Return (TNR) programs in Citrus Heights (where I live and work) and would really appreciate your input. Any identifying information and individual responses will be kept strictly confidential. The survey is provided via a link, which provides an extra layer of confidentiality as your email addresses are not collected. The purpose of this survey is to: 1) collect real-life experience data from community members who have utilized the River City Cat Rescue (RCCR) and/or the Sacramento Area Animal Coalition (SAAC) voucher programs and feral/community cat resources; and 2) collect information from Citrus Heights residents who have experience with cats and to get your thoughts about what is working and what could be done better from the your perspective. Thank you for your valuable assistance with this study!

This first section is asking general information about you as a resident of Citrus Heights.

1. Are you a Citrus Heights resident?

☐ Yes

☐ No

2. Are you a volunteer who does not live in the City but works in Citrus Heights or volunteers to help take care of feral or community cats in Citrus Heights?

☐ Yes

☐ No

Comments

3. What is your gender?

☐ Male

☐ Female

4. What is your age range?

☐ under 18

☐ 18-24

☐ 25-34

☐ 35-54

☐ 55+

5. Which of the following best describes where you live?

- ☐ Single family home
- ☐ Duplex
- ☐ Condominiums
- ☐ Apartments
- ☐ Mobile Home Community
- ☐ Senior Community

Comments

6. Are you affiliated with any rescue group? (Please check all that apply).

- ☐ Cats About Town
- ☐ Fluff Buddies
- ☐ Folsom Feline Rescue
- ☐ Itty Bitty Rescue
- ☐ River City Cat Rescue
- ☐ SOCKS
- ☐ SPCA
- ☐ Other

7. Any other affiliations you would like to share?

New Page

This next section seeks to obtain information about the characteristics of feral cat colonies within Citrus Heights. None of the questions require you to answer, however your honest feedback is greatly appreciated. There are optional text boxes provided with almost every question to allow for additional input if you desire to share your thoughts, ideas and suggestions. If you do not have any experience with feral cat colonies, PLEASE SKIP TO QUESTION 20.

8. Is your colony in (please select all that apply): If you are comfortable with sharing the information, please list the general location of the colony in the COMMENT section.

- ☐ an apartment complex
- ☐ a mobile home park
- ☐ an open space area
- ☐ an industrial area
- ☐ a commercial area
- ☐ your yard or on your property
- ☐ in the creek area
- ☐ in a park area
- ☐ Other

Comments

9. What best describes the terrain of your colony. Please select all that apply. If caring for multiple colonies, please select all applicable descriptions.

- ☐ Neighborhood streets, small residential lots
- ☐ Neighborhood streets, larger residential lots with acreage
- ☐ Semi-rural farm lots
- ☐ Open fields
- ☐ Vacant lots
- ☐ Along the creek areas
- ☐ Park areas
- ☐ Asphalt (parking lots or behind commercial buildings)
- ☐ Other

Comments

10. How long have you been caring for this/these colonies? Please specify for each colony.

11. Are you the only caregiver? Please select the answer that best reflects your caretaker status.

- ☐ I am the only caregiver.
- ☐ I share the colony care with one or more people.
- ☐ I don't share the colony care with anyone in general, but I have a back up caregiver if needed.
- ☐ Other

Comments

12. How many of the cats in each colony are altered? Please answer with the estimated number altered out of the total. For example, 5 of 12 cats in colony A are altered.

Comments

13. If some of the cats are not spayed or neutered (altered), please indicate the reason why.

☐ Unable to trap/catch.

☐ Too young.

☐ Can't afford the cost.

☐ Too old

☐ Other

Comments

14. If you had kittens in the past 3 years in your colony/ies, what happened to them?

☐ They were altered and remain with the colony today.

☐ They were caught and adopted out.

☐ They were given away to friends/neighbors.

☐ Other

Comments

15. Do cats ever get dumped or abandoned in your colony?

☐ Yes

☐ No

☐ Other

Comments

16. If cats do get dumped or left in your colony, why do you think it occurs?

☐ My colony is in an open space where people know there is a colony.

☐ My colony is near a creek where people will drop off cats and also wildlife.

☐ Other

Comments

17. How much money do you spend on cat food/supplies per colony every month (on average)?

18. Besides food and water, what other types of care do you provide for your colony cats?
(Please select all that apply).

- ☐ Rabies vaccinations
- ☐ Feline leukemia test and vaccinations
- ☐ Distemper combo vaccinations
- ☐ Deworming
- ☐ Ear mite treatment
- ☐ Flea treatment
- ☐ Other

Comments

19. How much do you spend on spay/neuter services each year?

- ☐ Less than \$100
- ☐ \$101 - \$200
- ☐ \$201 - \$300
- ☐ \$301 - \$400
- ☐ \$401 - \$500
- ☐ More than \$500
- ☐ More than \$1000
- ☐ Other

This next section is looking for information about how well the spay/neuter voucher programs are working through the Sacramento Area Animal Coalition (SAAC) and through River City Cat Rescue (RCCR). Again, there are optional text boxes after most questions to allow for additional comments, concerns, ideas and suggestions about what the City or the non-profits can do to improve the programs. None of the questions require you to answer, but your candid input is critical to the success of this research project.

20. Have you utilized the Sacramento Area Animal Coalition (SAAC) voucher program for feral cats? If NO, PLEASE SKIP TO QUESTION 24.

☐ Yes

☐ No

☐ Other

Comments

21. If so, how easy was the voucher to get from the SAAC website?

☐ Easy

☐ Somewhat easy

☐ Somewhat difficult

☐ Difficult

☐ Other

Comments

22. Were you able to get a spay/neuter appointment scheduled within 30 days of attempting to schedule the surgery?

☐ Yes

☐ No

☐ Other

Comments

23. What would you suggest to improve the SAAC voucher program for Citrus Heights users?

24. Have you utilized the River City Cat Rescue voucher program? IF NOT, PLEASE SKIP TO QUESTION 28.

☐ Yes

☐ No

☐ Other

Comments

25. If so, how easy was the voucher to get from the River City Cat Rescue website/phone number?

- ☐ Easy
- ☐ Somewhat easy
- ☐ Somewhat difficult
- ☐ Difficult
- ☐ Other

Comments

26. Were you able to schedule a spay/neuter appointment within 30 days of attempting to schedule it?

- ☐ Yes
- ☐ No
- ☐ Other

Comments

27. What would you suggest to improve the River City Cat Rescue voucher program for Citrus Heights users?

New Page

This next section has to do with the local regulations, ordinances and program guidelines. In particular, I am looking for your thoughts, ideas and insights related to the City's current rules and regulations and what you think will best help the City develop a TNR program that is sensitive to the cats and the community.

28. Did you know owned cats must be licensed in Citrus Heights?

☐ Yes

☐ No

☐ Other

Comments

☐ Yes

☐ No

☐ Other

30. What is your recommendation for the City to address colonies where several cats remain unaltered?

31. Do you support the TNR policy to register all feral cat colonies with the City or County of their residence?

☐ Yes

☐ No

☐ Other

32. Have any of the cats in your colony/ies been the subject of nuisance complaints that you know of?

☐ Yes

☐ No

☐ Other

33. What has been your experience with the Sacramento Area Community Cat program?

34. Are there any organizations (locally or nationally) that you believe "are doing things right"? If so, please list and provide a sentence or two about the specific strategies/policies that are working.

35. If you have had nuisance complaints made about cats within your neighborhood, how was it resolved?

- ☐ Spoke with neighbors, explained the TNR process and made adjustments in feeding/sheltering to address concerns.
- ☐ Worked with cat rescues to relocate some of the cats to reduce nuisance issues.
- ☐ Has not been resolved.
- ☐ Other

Comments

36. What are your suggestions for the City to consider as it looks at possible TNR programs?

Comments

37. Have you had an opportunity to work with Citrus Heights animal services staff since the City hired its own Animal Services staff in May of 2012? IF YOUR ANSWER IS NO, PLEASE SKIP TO QUESTION 44.

☐ Yes

☐ No

☐ Other

Comments

38. If so, please describe your experience.

- ☐ Very good
- ☐ Good
- ☐ Neither good nor bad
- ☐ Bad
- ☐ Very bad
- ☐ Other

39. Please briefly describe the reason you were in contact with Citrus Heights Animal Services and how the issue was resolved.

40. Please share any other comments or ideas you would like to share related to Citrus Heights animal services and the City's prospective TNR programs specifically.

Thank You!

Thank you for taking this survey. Your responses are very important to us and the study. Ultimately, this study will be included in the process of developing and implementing the City's TNR programs in the future.

Interview Guiding Questions -

- 1) The interview is set up to be somewhat unstructured by design.
 - a. Your general background with animal control
 - b. The development of your feral/community cat program
 - i. History
 1. How long ago did you start
 2. Bumps along the way
 3. PetSmart Grant
 - a. Challenges
 - b. Tips
 - c. Success rate
 - d. Staffing
 - ii. Implementation
 1. **Have nuisance cat complaints decreased?**
 2. **What regulations and rules do you utilize?**
 - a. Feeders
 - b. Hoarders
 - c. Other
 - iii. Lessons learned
 1. **What would you say are the most critical components for TNR to be successful?**
 - c. Your experience with colonies and caregivers – what is the most effective structure to work with volunteers
 - i. Types of challenges and opportunities you see for the various stakeholders
 - i. Any mediation utilized?
 - ii. **What kinds of strategies you have seen work and not work**
 - iii. Specific insights to the various stakeholders and what unique characteristics might be in the mix
 - iv. Any places or situations (in any of the cities you serve or in general) where TNR colonies didn't work and why (from different perspectives that you are familiar with)
 - d. **Any suggestions you have about working with the caregivers and the community the City will want to think about as it frames its programs**
 - e. **Any other insights you would like to share or suggest I look at further.**

Interview Guiding Questions -

- 1) The interview is set up to be somewhat unstructured by design.
 - a. Your general background with animal control
 - b. The development of your feral/community cat program
 - i. History
 1. How long ago did you start
 2. Bumps along the way
 - a. Challenges
 - b. Tips
 - c. Success rate – any numbers to share? Example – year 1 of the program and milestone points along the way?
 - d. Staffing
 - e. funding
 - ii. Implementation
 1. **Have nuisance cat complaints decreased?**
 2. **What regulations and rules do you utilize?**
 - a. Feeders
 - b. Hoarders
 - c. Others
 - iii. Lessons learned
 1. **What would you say are the most critical components for TNR to be successful?**
 - c. Your experience with colonies and caregivers – what is the most effective structure to work with volunteers
 - i. Types of challenges and opportunities you see for the various stakeholders
 - i. Any mediation utilized? Little Blue Society?
 - ii. Any places or situations (in any of the cities you serve or in general) where TNR colonies didn't work and why (from different perspectives that you are familiar with)
 - d. **Any suggestions you have about working with the caregivers and the community the City will want to think about as it frames its programs**
 - e. **Any other insights you would like to share or suggest I look at further.**

Small Group Interview Guiding Questions

- 1) The interview is set up to be somewhat unstructured by design, but I plan to ask the following questions:
 - a. Your background and roles within the Division
 - b. The development of your feral/community cat program
 - i. History
 1. How long ago did you start
 2. Bumps along the way
 3. Grant funding
 - a. Challenges
 - b. Tips
 - c. Success rate
 - d. Staffing
 - ii. Implementation
 1. **Have nuisance cat complaints decreased?**
 2. **What regulations and rules do you utilize?**
 - a. Feeders
 - b. Hoarders
 - c. Other
 - iii. Lessons learned
 1. **What would you say are the most critical components for TNR to be successful?**
 - c. Your experience with colonies and caregivers – what is the most effective structure to work with volunteers
 - i. Types of challenges and opportunities you see for the various stakeholders
 - i. Any mediation utilized?
 - ii. What kinds of strategies you have seen work and not work
 - iii. Specific insights to the various stakeholders and what unique characteristics might be in the mix
 - Citrus Heights issues versus County – differences and similarities?
 - d. **Any suggestions you have about working with the caregivers and the community the City will want to think about as it frames its programs**
 - e. **Any other insights you would like to share or suggest I look at further.**

Small Group Interview Guiding Questions -

1) The interview is set up to be somewhat unstructured by design, but I plan to ask the following questions:

- a. Your background and roles within RCCR
- b. The development of your TNR efforts cat program
 - i. History
 - 1. How long ago did you start
 - 2. Bumps along the way
 - 3. Biggest challenges

4. What regulations and rules do you support?

- a. Feeders
- b. Hoarders
- c. Other
- ii. Lessons learned
 - 1. What would you say are the most critical components for TNR to be successful?**
- c. Your experience with colonies and caregivers – what is the most effective structure to work with volunteers
 - i. Types of challenges and opportunities you see for the various stakeholders
 - ii. Specific insights to the various stakeholders and what unique characteristics might be in the mix
- d. **Any suggestions you have about working with the caregivers and the community the City will want to think about as it frames its programs**
- e. Any suggestions on improvements to the voucher system
 - i. From the user's perspective?
 - ii. From RCCR perspective
- f. **Any other insights you would like to share or suggest I look at further.**

Small Group Interview Questions -

- 1) The interview is set up to be somewhat unstructured by design, but I plan to ask the following questions:
 - a. Your background and roles within the Division
 - b. The development of your feral/community cat program
 - i. History
 1. How long ago did you start
 2. Bumps along the way
 3. Grant funding
 4. Challenges
 5. Successes/ Success rate
 6. Staffing/volunteers
 7. Colony registration
 - ii. Implementation
 1. **Have nuisance cat complaints decreased?**
 2. **What regulations and rules do you utilize?**
 - a. **Feeders**
 - b. Hoarders
 - c. Other
 - iii. Lessons learned
 1. **What would you say are the most critical components for TNR to be successful?**
 - c. Your experience with colonies and caregivers – what is the most effective structure to work with volunteers
 - i. Types of challenges and opportunities you see for the various stakeholders
 - ii. Any mediation utilized?
 - d. Any suggestions you have about working with the caregivers and the community the City will want to think about as it frames its programs
 - e. Cat licensing and mandatory micro-chipping – I am finding this to be a fairly common “best practices” recommendation. What has been your experience with the mandatory licensing approach?
 - i. Enforcement
 - ii. Low-cost micro-chipping
 - iii. Has your licensing rate increased?
 - iv. Have you been able to RTO more cats?
 - f. **Any other insights you would like to share or suggest I look at further.**

Interview Guiding Questions

- 1) The interview is set up to be somewhat unstructured by design, but I plan to ask the following questions:
 - Your background and roles within SAAC and *SacFerals* cat colonies in general
- 2) What are opportunities of your TNR efforts cat program
- 3) What are some of the challenges with TNR in general and Specifically in this region and Citrus Heights
- 4) What would you consider critical elements for success
- 5) Any regulations to consider?
- 6) When TNR is not working, what are your suggestions?
- 7) What are your Citrus Heights observations?
 - Caregivers
 - Others
- 8) What are some “lessons learned” you can share?
- 9) Any suggestions to improve the voucher system?
- 10) Suggestions for City as it moves forward with TNR implementation?

Interview Guiding Questions – Animal Services Officer Interviews

- 1) The interview is set up to be somewhat unstructured by design, but I plan to ask the following questions:
 - a. Your background and roles within the Division
 - b. The development of your feral/community cat program
 - i. History
 1. How long ago did you start
 2. Bumps along the way
 3. Grant funding
 4. Challenges
 5. Successes/ Success rate
 6. Staffing/volunteers
 7. Colony registration
 - ii. Implementation
 1. **Have nuisance cat complaints decreased?**
 2. **What regulations and rules do you utilize?**
 - a. Feeders
 - b. Hoarders
 - c. Other
 - iii. Lessons learned
 1. **What would you say are the most critical components for TNR to be successful?**
 - c. Your experience with colonies and caregivers – what is the most effective structure to work with volunteers
 - i. Types of challenges and opportunities you see for the various stakeholders
 - d. **Any suggestions you have about working with the caregivers and the community the City will want to think about as it frames its programs**
 - e. Cat licensing and mandatory micro-chipping – I am finding this to be a fairly common “best practices” recommendation. What has been your experience with the mandatory licensing approach?
 - i. Enforcement
 - ii. Low-cost micro-chipping
 - iii. Has your licensing rate increased?
 - iv. Have you been able to RTO more cats?
 - f. **Any other insights you would like to share or suggest I look at further.**

Guiding Interview Questions – Citrus Heights General Services - Program Assistants

- 1) The interview is set up to be somewhat unstructured by design, but I plan to ask the following questions:
 - a. Your background and roles within the Division
 - b. The development of your feral/community cat program
 - i. History
 1. How long ago did you start
 2. Bumps along the way
 3. Grant funding
 4. Challenges
 5. Successes/ Success rate
 6. Staffing/volunteers
 7. Colony registration
 - ii. Implementation
 1. **Have nuisance cat complaints decreased?**
 2. **What regulations and rules do you suggest?**
 - a. Feeders
 - b. Hoarders
 - c. Other
 - iii. Lessons learned
 1. **What would you say are the most critical components for TNR to be successful?**
 - c. Your experience with colonies and caregivers – what is the most effective structure to work with volunteers
 - i. Types of challenges and opportunities you see for the various stakeholders
 - ii.
 - d. Any suggestions you have about working with the caregivers and the community the City will want to think about as it frames its programs
 - e. Cat licensing and mandatory micro-chipping – I am finding this to be a fairly common “best practices” recommendation. What are your thoughts?
 - f. **Any other insights you would like to share or suggest I look at further.**