Research shows that <u>Trap-Neuter-Return (TNR)</u> is the humane and effective approach for community cats. TNR improves cats' health, saves their lives when they otherwise would have been killed in shelters, addresses community concerns, stabilizes colonies, and helps cats and people coexist.

Florida County Achieves 51% Decrease in Shelter Intake of Cats With Nonlethal Solutions

<u>Francis Hamilton. "Implementing Nonlethal Solutions for Free-Roaming Cat Management in a County in the Southeastern United States"</u> Frontiers in Veterinary Science **6 (2019): 259.**

Three nonlethal approaches to community cats, "low-income spay/neuter vouchers; small- and large-scale trap, neuter, vaccinate, and return (TNVR); and return to field (RTF)," □ were successfully implemented in the public shelter of Hillsborough County, Florida. This paper states that the nonlethal solutions "assisted in achieving a 51% decrease in intake since 2007 and increased the live-release rate to 81.8% of cats taken in at the Pet Resources Center in 2017." □

Findings: Nonlethal approaches to community cat population management, including TNVR and a focus on spay and neuter, are effective in reducing both shelter intake and in-shelter killing of cats.

Topics: Community Cats, TNR

Bay Area Colony of 175 Reduced to One Through Trap-Neuter-Return

<u>Daniel D. Spehar and Peter J. Wolf. "The Impact of Targeted Trap-Neuter-Return Efforts in the San Francisco Bay Area"</u> — **Animals 2020**, 10(11), 2089 (2020).

In 2004, approximately 175 community cats were living along a trail in Foster City, California. The city, the Homeless Cat Network, and the community joined forces to humanely stabilize this colony of cats, and Project Bay Cat was formed. The Homeless Cat Network's volunteers undertook an intensive TNR effort, with two private veterinary hospitals providing spaying or neutering and vaccinations for the cats. As of 2020, "an initial population of 175 cats declined by 99.4% over the 16-year program period. Of the 258 total cats enrolled between 2004 and 2020, only one remained at the end of the program period."

Findings: When communities come together to support TNR, cats are protected and colonies are effectively stabilized and reduced.

Topics: Community Cats, TNR

Association between a Shelter-Neuter-Return Program and Cat Health at a Large Municipal Animal Shelter (San Jose, CA)

Edinboro, Charlotte H, Watson, Heather N and Anne Fairbrother. "Association between a shelter-neuter-return program and cat health at a large municipal animal shelter" Journal of the American Veterinary Medical Association, 238, no. 3 (2016): 298-308.

Initiation of a Shelter-Neuter-Return (SNR) program decreased the number of cats admitted to the shelter, as well as the number that were killed. Resources to care for cats with Upper Respiratory

Infection (URI) increased, and due to positive changes in the URI treatment protocol, fewer cats were euthanized for URI, and more cats were treated at lower cost with a shorter shelter stay.

OBJECTIVE To determine effects of a shelter-neuter-return (SNR) program on cat admissions and health at a large municipal animal shelter in Northern California.

ANIMALS 117,383 cats for which data were recorded in the San Jose Animal Care Center database between January 1, 2006, and December 31, 2013.

Findings: SNR programs help shelters save more cats.

Topics: Shelters, Cat Health, SNR

Trap-Neuter-Return Humanely Stabilized and Reduced in Size the Merrimack River Colony

"Advocates report success with trap, neuter, return approach to stray cats." ☐ LA Times N.p. 29 Sept. 2009. Web. 9 Jan. 2014.

More than 300 community cats lived along the Merrimack River in Newburyport, Massachusetts in 1990. Thirty cats were killed by a private trapping company commissioned by the city, but within two years, 30 new cats joined the colony. This is a natural phenomenon known as the "vacuum effect." □ When cats are removed from an area, other cats move in to take advantage of the newly available resources. In 1992, the Merrimack River Feline Rescue Society started a TNR program that stabilized the colony and resulted in a population decline. Zorro, the last remaining cat from the colony, passed away in 2009 at age 16. Natural attrition is the normal evolution of TNR.

Findings: TNR is the only effective method for stabilizing and reducing community cat colonies, even for large, long-standing colonies.

Topics: Community Cats, TNR, Vacuum Effect

Trap-Neuter-Return at Atlantic City Boardwalk Reduces Colony Size Over Time

In 2000, Alley Cat Allies launched the Boardwalk Cats Project, a TNR program for the community cats living around the boardwalk in Atlantic City, New Jersey. Alley Cat Allies teamed up with Atlantic City's Health Department, the Humane Society of Atlantic City, and local advocates to begin the model TNR program that stabilized these colonies . Many of the cats trapped were young kittens or cats socialized enough to be put up for adoption. The rest were returned to the boardwalk, after being spayed or neutered, vaccinated, and eartipped. When the program started, there were approximately 275 cats living around the boardwalk. As a result of TNR, no kittens have been born at the boardwalk in over a decade, and the population size has significantly decreased through natural attrition and adoption. As of 2018, census reports that the number of cats has decreased to 87.

The Boardwalk Cats Project receives outspoken support from Atlantic City's local government, as well as many local businesses along the boardwalk. The public has responded positively to the program, which attracts tourists year-round.

Findings: When people learn how positive TNR is for cats and communities, the programs receive widespread support.

Topics: Community Cats, TNR, Boardwalk Cats Project, Cat Health

55% Reduction in Outdoor Colony Cats Since 2007 in Chicago Neighborhood

"Trap-Neuter-Return Case Study: 55% Reduction in Outdoor Colony Cats Since 2007." □ Cats in My Yard. 8 Jan. 2014. Web. 9 Jan. 2014.

In 2007, Chicago group, Cats In My Yard, began carefully tracking its TNR efforts, and the number of cats living in 19 colonies. Between 2007 and 2013, 153 cats in all the colonies went through TNR. By 2013, 70 cats remained. In these seven years, the community cat population in this neighborhood decreased by 55%.

Findings: From small groups of volunteers to citywide TNR programs, TNR is the only effective method for stabilizing and reducing community cat colonies.

Topics: Community Cats, TNR

Chicago's Large-scale Trap-Neuter-Return Program Significantly Reduces Colony Size in 23 Zip Codes

Schlueter, J. E-mail message to writer. 16 Jan. 2014.

Funiak, D. and R. Michalek. "Cook County Managed Care of Feral Cats Ordinance Sponsors Update." □ Presentation. Tree House Humane Society and PAWS Chicago. 2013.

A countywide TNR program in Cook County, Illinois reduced the size of community cat colonies in 23 zip codes by 41% in just five years. In 2007, Cook County passed legislation that created a formal structure for a countywide TNR program, with a coalition of private nonprofit organizations assuming the responsibility for managing community cat colonies. From 2008 to 2012, more than 17,538 community cats in Cook County were spayed or neutered, vaccinated, eartipped, and returned to their outdoor homes through this program. The coalition compared the number of cats in those zip codes before they started TNR, and the number five years after. In November 2007, there were 1,329 cats. At the end of 2012, there were only 788. The nonprofit coalition estimates that the program has prevented the births of tens of thousands of kittens.

Findings: Even in large-scale TNR programs that span multiple zip codes, neighborhoods, and colonies, TNR reduces colony size across the board.

Implementation of a Feral Cat Management Program on a University Campus

Hughes, Kathy L. and Margaret R. Slater. "Implementation of a Feral Cat Management Program on a University Campus." ☐ Journal of Applied Animal Welfare Science 5, no. 1 (2002): 15-28.

In the first year of a TNR program on the campus of Texas A&M University, 123 cats were trapped. In the second year, that number decreased to 35. In addition to that, only three kittens were found in the second year, and researchers determined that these were either lost or abandoned, as no litters or nursing mothers were seen that year. In just two years, 32 cats and kittens were adopted. Furthermore, there was a decrease in the number of calls about cats on college property.

Findings: TNR has proven to stabilize large colonies of community cats quickly.

Topics: TNR, Community Cats, Campus Cats

The Effect of Implementing a Feral Cat Spay/Neuter Program in a Florida County Animal Control Service

Hughes, Kathy L., Margaret R. Slater, and Linda Haller. "The Effects of Implementing a Feral Cat Spay/Neuter Program in a Florida County Animal Control Service." ☐ Journal of Applied Animal Welfare Science 5 (2002): 285-289.

The authors analyzed data from a community cat spay and neuter program in which volunteers cared for colonies in Orange County, Florida. They also studied the population of the county in the six years before the program began, to compare it with the first six years of the program. They found that the number of calls to animal control about cats, and the number of cats killed by animal control decreased in the six years after these programs were initiated, even while the human population grew significantly. In addition, they reported that the morale of those involved improved, and the residents who participated in the program felt empowered to help community cats in their neighborhoods.

Findings: TNR reduces the number of calls to animal control, cats killed by animal control, and improves morale.

Topics: TNR, Animal Control, Community Cats

Evaluation of the Effect of a Long-Term Trap-Neuter-Return and Adoption Program on a Free-Roaming Cat Population

Levy, Julie K., David W. Gale, and Leslie A. Gale. "Evaluation of the Effect of a Long-Term Trap-Neuter-Return and Adoption Program on a Free- Roaming Cat Population." ☐ Journal of the American Veterinary Medical Association 222, no. 1 (2003): 42-46.

This study tracked a TNR program on the University of Central Florida campus over the course of 11 years to determine how effective TNR was at stabilizing their community cat population. After just four years, no new kittens were born, and at the end of the study, the overall population of cats had decreased by 66%. Over 80% of the cats had been residents for more than six years, showing that TNR keeps colonies stable and healthy year after year.

Findings: On university campuses, TNR has proven to stabilize community cat populations in the short and long term.

Topics: TNR, Community Cats, Campus Cats, Cat Health

Washington, D.C. Cat Colony Stabilized and Eventually Reduced to Zero

A TNR program in the Adams Morgan neighborhood of Washington, D.C. reduced a colony of 54 community cats to zero cats. This colony resulted in the founding of Alley Cat Allies in 1990, just a few months after the co-founders began helping the caregivers carry out a formal program to help the 54 cats. Caregivers and volunteers placed socialized kittens in homes, and implemented TNR for the rest of the colony. In addition to stabilizing the population, TNR also reduced mating-related

behaviors, such as fighting and roaming, making the cats less noticeable. Furthermore, the health of the cats also improved. By November 1997, seven years after the TNR program started, only six cats remained in the alley. The last cat from the colony died in 2007 at age 17.

Management of Feral Domestic Cats in the Urban Environment of Rome (Italy)

Natoli, Eugenia, et. al. "Management of Feral Domestic Cats in the Urban Environment of Rome (Italy)." ☐ Preventative Veterinary Medicine 77 (2006): 180-185.

Examining a well-established TNR program in Italy over 10 years showed that a long-term program significantly reduces community cat colony size. Colony size consistently decreased over the time period, ranging from a 16% decline in colonies spayed or neutered three years into the program, to a 32% decrease in colonies spayed or neutered six years in. As the program became more visible, the number of registered colonies increased from 76 to 965. Furthermore, community education, the authors write, is crucial to preventing intact pet cats from joining the community cat population.

Findings: Community education is crucial to developing long-term TNR programs and caring for colonies.

Topics: Education, TNR, Community Cats

Effect of Neutering on Two Groups of Feral Cats

Neville, P.F. and J. Remfry. "Effect of Neutering on Two Groups of Feral Cats." ☐ The Veterinary Record 114 (1984): 447-450.

Researchers studied two colonies in Regent's Park, London, to determine whether spaying or neutering had any negative effects on the social structure of the colony, or on individual cats. No negative health effects were observed, and the social bond between members of the colony strengthened after the cats were spayed or neutered. Cats spent more time in groups, showed fewer aggressive behaviors toward one another, and fought less. During the course of the study, no new litters were born.

Findings: TNR has positive effects on the social structure of cat colonies.

Topics: Community Cats, TNR, Cat Health

Analyzing Approaches to Feral Cat Management One Size Does Not Fit All

Stoskopf, M. and F. Nutter. "Analyzing approaches to feral cat management – one size does not fit all." □ Journal of American Veterinary Medical Association 225, no. 9 (2004): 1361-1364

In this study, researchers observed spayed or neutered community cat colonies and intact colonies in North Carolina. They found that TNR stabilizes colonies and causes population decline over time. All six spayed or neutered colonies decreased in population during the first two years of study, with an average decrease of 36%, and continued to decline. During the same two years, the three intact colonies significantly increased in size, with an average increase of 47%.

Findings: Community cat colonies who go through TNR decrease in size, while colonies that are not spayed or neutered increase.

Topics: Community Cats, TNR

Managing Feral Cats on a University's Campuses: How Many Are There and Is Sterilization Having an Effect?

Jones, A. and C. Downs. "Managing feral cats on a university's campuses: How many are there and is sterilization having an effect?" □ Journal of Applied Animal Welfare Science 14 no. 4 (2011): 304-320.

The study provides a snapshot of community cat colonies at eight sites across five campuses of a South African university. These colonies had different levels of sterilization and colony management. The researchers provide projections as to what would happen to the population over the course of five years, depending on the percentage of the cats who were spayed or neutered. If none were spayed or neutered, the population would double. If 100% were spayed or neutered, the population would be cut in half. The population would stabilize with 55% spayed or neutered. As this research demonstrates, it is not necessary to have 75% or more cats spayed or neutered to have an effect on a population of community cats.

Findings: Even if you can't spay or neuter every community cat right away, you can still make a difference.

Topics: Community Cats, TNR, Campus Cats