

# CASE STUDIES

Trap-Neuter-Return Effectively Stabilizes and Reduces Feral Cat Populations

Copyright © 2015 by Alley Cat Allies, Inc. All Rights Reserved. 7920 Norfolk Avenue, Suite 600 Bethesda, MD 20814-2525 www.alleycat.org

# Trap-Neuter-Return Effectively Stabilizes and Reduces Feral Cat Populations

Trap-Neuter-Return (TNR), which involves humanely trapping stray and feral cats and having them vaccinated, spayed/neutered, and "eartipped"\* before returning them to their outdoor home, is the only effective method of stabilizing outdoor cat colonies. As a result of TNR, the birth of new kittens in the colony slows down and eventually ends when all the cats are spayed/neutered. In addition, socialized cats and kittens are spayed/neutered and then often put up for adoption, causing an immediate reduction in the population size.

The following case studies demonstrate that TNR successfully stabilizes and reduces feral cat populations around the world—everywhere from South African university campuses to urban Chicago blocks.

<sup>\*</sup> The word "eartip" describes when a small portion of the tip of a feral cat's left ear is surgically removed while the cat is anesthetized to denote that the cat has been neutered and vaccinated. Eartipping is the most effective way to identify neutered feral cats from a distance, to make sure they are not trapped and do not undergo surgery a second time.



### Trap-Neuter-Return at Texas A&M University Effectively Stabilizes Feral Cat Colonies

In a 2002 study published in the *Journal of Applied Animal Welfare Science*, Kathy Hughes and Margaret R. Slater document the success of a Trap-Neuter-Return program on the campus of Texas A&M University, looking at the changes between the implementation year and the following year. In the first year, 123 cats were trapped, compared with 35 in the second year.<sup>1</sup>

Over the course of the program, 32 cats and kittens were adopted. In the second year, no litters or nursing mothers were seen. While the study did not measure the change in the total number of cats on campus over the two-year period, the researchers noted: the decrease in cats needing to be trapped from the previous year; the adoption of socialized campus cats and kittens into homes; and a decrease in the number of calls concerning cats on college property.

*Findings:* TNR can stabilize large feral cat colonies quickly—often in as little as a year.

### University of Central Florida Trap-Neuter-Return Program Considerably Reduces Feral Cat Population

A 2003 study published in the *Journal of the American Veterinary Medical Association* found that TNR keeps cat colonies stable and healthy year after year. The 11-year study on the University of Central Florida campus observed the number of cats on campus decline by 66%, with no new kittens born after the first four years of operation.<sup>2</sup>

At the end of the study, most of the remaining cats were adults: 83% had been part of the program for more than six years, indicating a healthy lifespan for feral cats after TNR.

*Findings:* TNR keeps feral cat colonies stable and healthy in both the short-term and the long-term.



In Trap-Neuter-Return programs, feral cats are returned to their outdoor homes after they are spayed/ neutered, vaccinated, and eartipped by a veterinarian.

### Trap-Neuter-Return Significantly Reduces North Carolina Cat Colony Size After Two Years

In a 2004 study in the *Journal of the American Veterinary Medical Association*, researchers observed neutered feral cat colonies and intact feral cat colonies in North Carolina and found that TNR stabilizes colonies and causes population decline over time. All six neutered feral cat colonies in the study decreased in population during the first two years of study, with a mean decrease of 36%, and continue to decline. During the same two years, the three control colonies significantly increased in size, with a mean increase of 47%.<sup>3</sup>

*Findings:* Feral cat colonies that go through TNR decrease in size, while colonies that are left unneutered increase in size.

# Neutering Significantly Impacts Populations in South African University Colonies

A 2011 study in *Journal of Applied Animal Welfare Science* looks at the populations of feral cats at eight sites across five campuses of a South African university. The study provides a snapshot of colonies with different levels of sterilization and colony management, showing what managed colonies look like at one moment in time. Based on their observations, the researchers provide projections as to what would happen to the population over the course of the next five years, depending on the percentage of the cats who are neutered. At 0% neutering, the population would double. At 100% neutering, the population would be cut in half. The population would stabilize with 55% neutering. This shows how different percentages of cats neutered effect a population.<sup>4</sup>

Contrary to the figure often quoted, it is not necessary to have a 75% or higher level of neutering. In this study's population, having 60% of the cats neutered shows a decline.

*Findings:* Even if you can't spay/neuter every feral cat right away, you can make a difference by spaying/neutering as many as possible.



A few of the original colony members - 25 years ago in an alley in Adams Morgan. No cats remain in the alley today.

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

A colony of feral cats in the Adams Morgan neighborhood of Washington, D.C. was eventually reduced to zero as a result of a Trap-Neuter-Return program. This colony was the reason Alley Cat Allies was formed as an organization 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 newly recruited volunteers implemented TNR for the colony, taming kittens and placing them in adoptive homes, and returning adult cats back to the colony after they were spayed/neutered and vaccinated. In addition to stabilizing the population, spaying/ neutering the cats ended behaviors associated with mating including fighting and roaming, making the cats less noticeable. The health of the cats also improved. By November 1997, just 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.

*Findings:* TNR allows cats to live out their natural, long lives content and healthy in their outdoor homes, and can eventually reduce colonies to zero through adoption of socialized cats and kittens and natural attrition.

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

More than 300 stray and feral cats lived along the Merrimack River in Newburyport, Mass. in 1990. The city brought a private trapping company in to trap and kill some of the cats. Thirty cats were killed, but within two years, those cats had been replaced by 30 more cats who joined the colony. When cats are removed from an area, there is a vacuum effect—other cats quickly move in to take advantage of newly available resources, and they breed back to capacity.

In 1992, the Merrimack River Feline Rescue Society started a Trap-Neuter-Return program for the cats on the waterfront. The TNR program stabilized the colony and resulted in a decline in population.<sup>5</sup> Zorro, the last remaining cat from the colony, passed away in 2009 at age 16. Natural attrition is the normal evolution of TNR.

*Findings:* Catching and killing cats creates a vacuum and the population rebounds quickly. TNR is the only effective method for stabilizing and eventually reducing feral cat colonies, even for large, long-standing colonies.

### Bay Area Colony Reduced by More than Half Through Trap-Neuter-Return

In 2004, approximately 175 feral cats were living along a popular hiking and biking trail in Foster City, Calif. in the San Francisco Bay Area. The City of Foster City, the Homeless Cat Network, and the community decided to join 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 spay/neuter and vaccinations for the cats.



As of 2013, 95% of the cats living along the trail were spayed/neutered, and the colony size had reduced by 53% through natural attrition and adoption of socialized stray cats and kittens.<sup>6</sup>

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



A few of the feral cats who calls the Atlantic City Boardwalk home.

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

In 2000, Alley Cat Allies launched the Boardwalk Cats Project, a Trap-Neuter-Return program for the cats living around the boardwalk in Atlantic City, N.J. Alley Cat Allies teamed up with Atlantic City's Health Department, the Humane Society of Atlantic City, and local advocates to begin the highly successful TNR program that stabilized the colonies of feral cats living at the boardwalk. 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 sporting eartips indicating that they were neutered and vaccinated. As TNR took effect, births of new kittens at the boardwalk gradually ceased. When the program started, there were

approximately 275 cats living around the boardwalk. As a result of the program, no kittens have been born at the boardwalk in over a decade and the population size has significantly decreased through natural attrition and adoption. Alley Cat Allies' recent census reports that the number of cats living at the boardwalk has decreased to 127.

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 also responded positively to the program, which attracts tourists year-round.

*Findings:* When people learn how positive TNR programs are for cats and communities, the programs receive widespread support and community members are willing to volunteer or donate to support the program.

# Trap-Neuter-Return Decreases a Chicago Neighborhood's Cat Population by More Than Half

In 2007, a group in Chicago called Cats In My Yard starting carefully tracking its Trap-Neuter-Return efforts and the number of cats living in 19 colonies. The colonies are all close together and contained within one large city block bordered by busy main streets. Between 2007 and 2013, 153 cats in the 19 colonies went through TNR. In 2013, a total of 70 cats remained in these colonies. In seven years, the cat population in this neighborhood decreased by 55%.<sup>7</sup>

*Findings:* TNR programs effectively stabilize feral cat colonies and reduce them in size over time—from small groups of volunteers to large-scale, citywide TNR programs.

### Rome Trap-Neuter-Return Program Consistently Decreases Colony Size

A 2006 study in *Preventative Veterinary Medicine* that documents the cat population over 10 years in a well-established Trap-Neuter-Return program in Rome, Italy determines that the long-term program significantly reduced feral cat colony size. From 1991 to 2000, nearly 8,000 cats were neutered and returned to their colony locations. The study spanned 103 colonies of outdoor cats. Colony size consistently decreased over the time period, ranging from a 16% decline in population in colonies three years into the program, to a 32% decrease in colony size after six years.<sup>8</sup>

#### Findings: Large-scale, scientific studies show that TNR consistently decreases colony size.

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

A countywide TNR program in Cook County, Ill., which includes Chicago, reduced the size of feral cat colonies in 23 zip codes by 41% in just five years. A coalition of private nonprofits that carries out TNR in Cook County compared the number of cats in 23 zip codes before they started TNR and the number approximately five years after. In November 2007, there were 1,329 in the 23 zip codes. At the end of 2012, there were only 788.9 The colonies were stabilized through TNR, and reduced in size through adoption of socialized cats and kittens and natural attrition. In 2007, Cook County passed legislation that created a formal structure for a countywide TNR program, with private nonprofit organizations assuming the responsibility



for managing feral cat colonies. From 2008 to 2012, more than 17,538 feral cats in Cook County were spayed/neutered, vaccinated, eartipped, and returned to their outdoor homes through this program.<sup>10</sup> 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, colonies, and neighborhoods, TNR effectively reduces colony size across the board.



### **ENDNOTES**

- 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.
- 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.
- 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.
- 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.
- "Advocates report success with trap, neuter, return approach to stray cats." *LA Times* N.p. 29 Sept. 2009. Web. 9 Jan. 2014.
- 6. "Project Bay Cat." Homeless Cat Network. Web. 9 Jan. 2014.
- "Trap-Neuter-Return Case Study: 55% Reduction in Outdoor Colony Cats Since 2007." Cats in My Yard. 8 Jan. 2014. Web. 9 Jan. 2014.
- 8. Natoli, Eugenia, et. al. "Management of Feral Domestic Cats in the Urban Environment of Rome (Italy)." *Preventative Veterinary Medicine* 77 (2006): 180-185.
- 9. 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.

## ADDITIONAL PUBLICATIONS FROM ALLEY CAT ALLIES



#### *Trap-Neuter-Return Ordinances and Policies in the United States: The Future of Animal Control*

This 2014 Law & Policy Brief shows that a huge—and growing number of local governments nationwide have officially embraced Trap-Neuter-Return for outdoor cats. Alley Cat Allies' legal team reviewed hundreds of municipal and county codes and animal control policy statements, finding that more than 430 governments had official policies supporting TNR. That number continues to rise.

TRAP-NEUTER-RETURN ORDINANCES ACROSS THE UNITED STATES (2014)

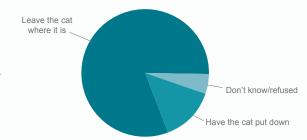




#### U.S. Public Opinion on Humane Treatment of Stray Cats

An overwhelming majority of Americans believe that leaving a stray cat outside to live out his life is more humane than having him caught and killed, according to a nationally representative survey conducted for Alley Cat Allies by Harris Interactive. These results reveal a significant disparity between the public's humane ethic and the operating policy of most U.S. animal pounds and shelters.

If you saw a stray cat in your community and could only choose between two courses of action—leaving the cat where it is outside or having the cat caught and then put down—which would you consider to be the more humane option for the cat?







## www.alleycat.org

. . . . . . . . . . . . . . . . . . .

7920 Norfolk Avenue, Suite 600 Bethesda, MD 20814-2525 Phone: 240-482-1980 info@alleycat.org

©2015