



Trap Neuter Return

**An Effective Strategy for the
Humane Reduction of the
Feral and Stray Cat Population
in Edmonton**

Foreword

**Thank you to Neighborhood Cats for their work with feral cats in New York City, New York.
And for providing the information they have compiled to be used in this concise report.**

www.neighborhoodcats.com

What is Trap-Neuter-Return

- Trap-Neuter-Return, popularly known as TNR, is a humane animal management program designed to resolve a community's severe feral and stray cat overpopulation crisis. ¹
- Two approaches Expert and Grassroots²
- Determining cat figures: Exact figures on the cats' population are elusive, but can be estimated. Dr. Julie Levy, DVM, a professor at the University of Florida, Gainesville and one of the leading academicians in the feral cat field, evaluated demographic studies on the topic and concluded that, "[f]or purposes of estimating the size of a community's feral cat population, it is reasonable to estimate 0.5 cats per household."³
- To date, the official policy for dealing with feral cats has been a mixture of "trap-and-kill" - so named because ferals are unadoptable and invariably end up being euthanized when captured - and doing nothing. Both approaches are failing as the community street cat population continues to grow exponentially.
- Because of feral population dynamics, trap-and-kill has no impact on the overall number of cats, creating no more than short-lived dips in their levels. The method is particularly ineffective when practiced sporadically and in random locations. Doing nothing simply allows a bad situation to get worse, yet ignoring the problem has been the dominant approach so far. It would appear the reason for this is simple: lack of resources. Even if our animal control officers spent every working hour trying to capture the cats, they would never get more than a small percentage. The officers' limited time is considered better spent on more immediate and solvable problems.

In sum, the present situation in Edmonton is characterized by a city with a feral and stray cat situation that needs to be resolved, an animal control agency dealing with cat complaints that never go down in volume, a shelter system overburdened with the cats and their offspring, and the employment of methodologies that have completely failed in the past and have no reasonable chance of success in the future.

Clearly the time has come to take a new approach.

1 "Feral" refers to cats who are living outside human homes and have reverted to a wild state, while "stray" refers to cats who have been recently abandoned and are still domesticated. Most street cats are feral and tend to live in family groups referred to as colonies.

2 Expert Approach refers to members of the group practicing the actual TNR processes
Grassroots Approach refers to member of the community trained to practice some TNR processes

3 Levy, Julie, DVM, "Feral Cat Management," Chap. 23, p. 378, in *Shelter Medicine for Veterinarians and Staff* (Blackwell Publishers, 2004)

The Alternative to Traditional Methods

The alternative that has proven effective at controlling the cats' population in many communities is: Trap-Neuter-Return (TNR). TNR involves three steps:

- (1) trapping the cats in a colony,
- (2) veterinary intervention in the form of neutering, eartipping and rabies vaccination, and
- (3) return of the cats to their home territory where they are then fed, sheltered and monitored on an ongoing basis by a designated caretaker.

Whenever possible, kittens and friendly, adoptable adults are removed from the colony and offered for placement in homes.

TNR is growing increasingly popular and being utilized in more and more communities across the United States and in some provinces in Canada. This movement can be attributed to its many proven advantages over more traditional methods of animal control, including permanent reduction of feral and stray cat populations, cost savings to animal control and the elimination of nuisance behaviors like spraying and fighting. In addition, by returning the ferals to their territory, TNR allows the neutered and vaccinated cats to provide the public health benefits of vermin abatement. The lower feral population also helps to lower any predation on birds and wildlife by the cats.

Unlike any other method known, Trap-Neuter-Return holds out the realistic possibility of a permanent, long-term solution to feral and stray cat overpopulation.

The Advantages of TNR

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• Feral and Stray Cat Population Reduction

• TNR reduces free-roaming cat populations through two means – first, by the removal of adoptable cats, and, second, through attrition outpacing births over time.

In San Francisco, beginning in 1993, the San Francisco SPCA combined with San Francisco Animal Control introduced a comprehensive city-wide TNR program, one that combined no cost spay/neuter with educational initiatives and incentives for getting feral cats altered. From 1993 through 1999, cat impounds dropped by 28%, euthanasia rates for feral cats dropped by 73%, and euthanasia rates for all cats fell by 71%.⁴ Today, San Francisco SPCA operates a “grassroots” approach with their Feral Fix program⁵

Proof that TNR effectively reduces feral populations in the long term also comes from the academic community. Dr. Levy conducted an eleven year TNR project at her campus at the University of Florida, Gainesville.⁶ The program resulted in a 66% decline in the feral population over the course of the study. Dr. Levy concluded that, “A comprehensive long-term program of neutering followed by adoption or return to the resident colony can result in reduction of free-roaming cat populations in urban areas.”

• Cost Savings

TNR could provide substantial cost savings to animal control in two ways. First, there is the volunteer manpower generated to get the cats fixed and stop them from reproducing. Even now, at its early stages in Edmonton, TNR has brought countless hours of volunteer labor to bear on getting the feral cat situation under control, none of which has cost the city a cent. Given the magnitude of the problem, there is no realistic possibility the municipality would want itself to fund a large enough animal control work force to resolve the overpopulation crisis. I believe volunteers and the cost savings they represent are crucial to move beyond the current state of affairs.

An ongoing TNR project performed in an Edmonton commuter city exemplifies how TNR, by creating public-private partnerships, can solve animal control problems while at the same time reducing costs to the municipality.

For example:

Keith T., was feeding a large colony of unneutered feral cats in his backyard when the situation was

⁴ San Francisco SPCA report, Sept. 2000.

⁵ San Francisco Feral Fix program at <http://www.sfspca.org/veterinary-services/feral-fix>

⁶ Levy, J., “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, Vol. 222, No. 1, January 1, 2003.

brought to our attention. We have estimated there are approximately 50 cats and kittens in this particular colony. To date, 31 animals have been spayed/neutered, vaccinated, micro-chipped and returned and 14 kittens are in foster. This equates to approximately 88% of this colony not reproducing further and a drop of 28% in colony numbers just by the kittens being removed. This is an ongoing project, only one cat so far has been euthanised on vet recommendation. All are happy, no neighbours are complaining as nuisance behaviours associated with un-fixed cats has been reduced.

- **Reduced Nuisance Behavior and Fewer Complaints**

Neutering the cats resolves most quality of life issues. The noxious odor associated with the spraying of unaltered males is caused by testosterone in the urine. Once the cat is fixed, this is no longer a problem. The cessation of reproductive activity also brings an end to mating behavior and the noise associated with it – both the yowling of females in heat and the fighting among male cats. In addition, neutered feral colonies tend to roam much less and so become much less visible.

- **Caretaker Cooperation**

No effective animal control policy for feral cats can be implemented on a large scale without the cooperation of the people who feed and watch over the cats on a daily basis. Trapping cats is generally accomplished by baiting humane box traps that close behind a cat when he enters to eat the bait. If food is not withheld the day prior to trapping, many cats will not enter the traps. Caretaker cooperation in withholding food is therefore essential. Caretakers also possess unique knowledge regarding the cats, including their numbers, habits and whereabouts. As a result, a caretaker can either greatly assist or effectively thwart animal control efforts.

The Lack of Effective Alternatives for Feral Cat Control

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TNR is an effective tool for enlisting public support to solve a difficult community problem while at the same time mitigating public anger resulting from either the “trap-and-kill” or “do nothing” methodologies. One of the most powerful arguments for Trap-Neuter-Return as a method of feral and stray cat control is also one of the most basic – nothing else works. Whatever its imperfections in practice and theory, TNR is the only animal control methodology that has shown a reasonable chance of controlling feral cat populations in an urban environment like Edmonton. Whatever ills one may rightly or wrongly associate with feral cats – whether it’s public health concerns, wildlife predation or anything else – those problems will not be reduced without a reduction in the level of the feral cat population. To achieve this, TNR is the only approach with hope of success, as an examination of the available alternatives makes clear.

• Trap-and-kill

Trap-and-kill has been the traditional approach of animal control in Canada towards free-roaming cats for decades. It should be enough to conclusively establish the complete failure of this method by pointing out that current estimates of the number of feral cats in this country could run into hundreds of thousands. Trying to remove the cats doesn’t work to lower their numbers. It’s a clumsy, simplistic technique that completely fails to take into account critical environmental factors and feral cat population dynamics. Trap-and-kill results in nothing but turnover – new feline faces, but not fewer. There are a number of reasons for this, including (a) the “vacuum effect,” (b) overbreeding by untrapped cats, (c) abandonment of domestic cats and, (d) lack of animal control resources.

The Vacuum Effect

The “vacuum effect” was first chronicled by wildlife biologist Roger Tabor during his studies of London street cats. He observed that when a colony of feral cats was suddenly removed from its territory, cats from neighboring colonies soon moved in and began the unchecked cycle of reproduction anew until the population was back up to its former level.⁷ As explained in another study, “the presence of feral cats in a place indicates an ecologic niche for approximately that number of cats; the permanent removal of cats from a niche will create a vacuum that then will be filled through migration from outside or through reproduction within the colony, by an influx of a similar number of feral cats that are usually sexually intact; and removal of cats from an established feral colony increases the population turnover, but does not decrease the number of cats in the colony.”⁸

Migration of new cats into a recently vacated territory can be traced to two factors: first, feral cats are present at a particular location for a reason - the habitat provides adequate food and shelter. Second, no

⁷ Tabor, Roger, “The Wild Life of the Domestic Cat,” p. 183 (1983)

⁸ Zaunbrecher, Karl I., DVM, & Smith, Richard E., DVM, MPH, “Neutering of Feral Cats as an Alternative to Eradication Programs,” *Journal of the American Veterinary Medical Association*, Volume 203, Number 3, August 1, 1993.

feral colony is an island, but is part of an extensive ecosystem containing similar colonies, one adjoining the next. As a result, if a colony is removed from its territory, but the habitat is left unchanged, neighboring cats will move right in to take advantage of the food source and shelter that remains. Reproduction and population growth ensue until the natural ceiling is again reached, that being the number of cats the habitat can support.⁹

Eliminating all food sources is virtually impossible.¹⁰ Once a cat is spotted by a kind soul who starts to leave food, a food source is created. People are going to feed outdoor cats no matter what, as the ineffectiveness of feeding bans with serious civil and criminal consequences has demonstrated. It is also difficult in institutional settings, whether it's jails, restaurants or apartment complexes, to adequately seal dumpsters and other garbage containers to keep out feral cats.

Overbreeding

The trapping and removal of every member of a feral colony is a difficult and time-consuming task. Even TNR supporters have great difficulty in capturing 100 percent of a colony and must allow at least several days of trapping efforts to accomplish this. When busy animal control personnel attempt to trap a feral colony, inevitably some cats are left behind. With less competition for the food and shelter that remains, these cats reproduce faster and more of their offspring survive until the carrying capacity of the habitat is again reached.

Abandonment

Unaltered domestic cats are constantly being abandoned into our streets, often by uneducated owners who do not realize problem behaviors by sexually intact cats could be readily resolved by neutering. Without monitors and caretakers in place to quickly capture and either fix or adopt out these former domestics, they too, are available to repopulate any suitable habitat made vacant by trap-and-kill efforts.

Lack of animal control resources

Few communities, including Edmonton, have the resources to devote to trying to trap and remove a significant percentage of the feral cats in the municipality.

9 Clifton, Merritt, "Seeking the truth about feral cats and the people who help them," ANIMAL PEOPLE, Nov. 1992.
10 Hartwell, Sarah, "Why Feral Eradication Won't Work," (1994, 2003), www.messybeast.com/eradicat.htm

• Eradication

Eradication of feral cats, defined as the one hundred percent removal of all ferals from an area, has been advocated since at least 1916. The method has proven successful, however, only on small, uninhabited islands after decades of intensive control measures including poisoning, hunting, trapping and introduction of infectious feline diseases. One of the best-known examples of the difficulty of eradication is Marion Island, a small uninhabited island (12 miles x 8 miles) located southeast of South Africa between South Africa and Antarctica.

In 1949, a group of scientists left the island, leaving behind 5 unneutered cats. By 1977, there were an estimated 3,400 cats preying on ground-nesting seabirds. Deliberate infection of the feral cat population with Feline Panleukopenia Virus (feline enteritis) followed and killed around 65% of the cat population by the early 1980's. Many of the remaining 35% developed immunity to the disease and continued to breed. Between 1986 and 1989, 897 cats were further exterminated by hunting. Traps with poison baits were then used to kill the cats who eluded the guns. No cats have been seen since 1991. In 1993, sixteen years after it was begun, the eradication program was declared a success.

The methods used on Marion Island – introduction of infectious disease, shooting and poisoning – would be unfeasible in a populated area such as Edmonton for safety, cost and aesthetic reasons. Even assuming such techniques could be employed, the vacuum effect discussed earlier, which was not present in a geographically isolated situation like Marion Island, would likely outpace eradication efforts.

• Trap-and-remove

Compassionate callers reporting feral cats often initially seek the adoptive placement of the cats or their relocation to a safer place. This “trap-and-remove” approach is impractical on a large scale. Socialization of feral cats is an uncertain process, and even if the time and resources existed to implement socialization on a widespread basis, there are not enough available homes for them. As it is, shelters are at capacity with completely tame cats. Regarding relocating the cats, Dr. Slater writes, “Transfer to a new location is rarely recommended because finding a suitable site can be difficult, time consuming, and stressful for the cats and often has low survival rates at the new site.” Furthermore, trap-and-remove creates the same vacuums in the original territory as trap-and-kill and so will likewise have no long-term impact on feral population levels.

• Do nothing

The growth of an uncontrolled feral cat population, as with any wild species, will level off when the cats exceed the capacity of the habitat. Beyond capacity, population control comes in the form of starvation and disease. The problems associated with unneutered feral cats remain. Usually, doing nothing, “results in continued breeding, increased cat mortality, continuing complaints by those near the colony, public health concerns, animal welfare concerns (often generated by high kitten mortality rates), and eventual financial costs in personnel, transportation, and euthanasia to animal care and control agencies and local governments.”

Conclusion

A feral and stray cat overpopulation crisis is now underway in our community, resulting in an overcrowded Humane Society, higher euthanasia rates, quality of life complaints and financial burdens. The methods of the past – a mixture of trap-and-kill and doing nothing – have had no impact. Even if the resources were available for animal control to attempt a wholesale removal of the cats, which they’re not, the effort would fail due to feral population dynamics and public opposition. Trap-Neuter-Return alone holds out the possibility of turning the crisis around, stemming the flood of homeless cats into shelters, lowering costs and resolving complaints. Therefore, it is respectfully requested that Trap-Neuter-Return be endorsed as official policy for Edmonton.

Notes



Date: January 11, 2010
Little Cats Lost