



The Negative Impact of Free-Roaming Cats: Fact vs. Fiction

A number of recent “studies” investigating the impacts of free-roaming cats on both wildlife and humans have documented alarming findings, thereby receiving a great deal of media attention. Such work is, all too often, little more than a thinly-veiled attempt to undermine non-lethal efforts for managing our communities’ stray, abandoned, and feral cats. In fact, a careful look at this research reveals a range of claims that fail to stand up to scrutiny.

TNR opponents claim...

TNR is not a feasible solution for controlling the population of a feral cat colony.

The reality is...

TNR is a proven and humane method for reducing the numbers of community cats. TNR involves trapping, sterilizing, vaccinating, and releasing community cats back to their colonies. Sterile cats can’t reproduce, and over time, TNR therefore reduces the number of free-roaming cats in the target colony. Among the most well-documented examples:

- A TNR program on the campus of the University of Central Florida begun in 1991 led to the adoption of nearly half (47 percent) of the 155 cats living on campus over an 11-year observation period. In 2002, upon completion of a related six-year study, just 23 cats remained on campus.¹
- In a study comparing sterilized/managed and unsterilized/managed colonies of feral cats, researchers observed a 36 percent average decrease among six sterilized colonies in the first two years; three unsterilized colonies experienced an average 47 percent increase over the same period.² Four-year follow-up census: One colony was reduced from 10 cats to none; at seven years, another colony originally containing 10 cats had been reduced to one cat.³
- A 2000–2001 survey of caretakers in Rome, Italy, revealed a 22 percent decrease overall in the number of cats in 103 colonies despite a 21 percent rate of “cat immigration.” Although some colonies experienced initial increases, numbers began to decrease significantly after three years of TNR: “Colonies neutered 3, 4, 5 or 6 years before the survey showed progressive decreases of 16, 29, 28 and 32 percent, respectively.”⁴

TNR opponents claim...

Free-roaming cats in the U.S. are responsible for the deaths of an estimated 1.4 to 3.7 billion birds and 6.9 to 20.7 billion mammals annually.⁵

The reality is...

- The 1.4 – 3.7 billion annual bird mortalities reported represent 29 to 76 percent of the estimated 4.7 billion land birds in all of North America.⁶ If these figures were accurate, the continent would have been devoid of birds long ago. (Even if, as some have suggested, “the total [population of land birds] could be two to three times higher in some regions,”⁷ the implied impact due to predation by cats is simply not supported by existing data.)
- These estimates leave no accounting for other well-documented causes of bird mortality, such as pesticide use, oil spill, habitat loss, window strikes, or other anthropogenic causes.
- Dennis Turner, editor and key contributor to *The Domestic Cat: The Biology of Its Behaviour* and board member of the International Association of Human-Animal Interaction Organizations, argues that “any claims that cats are a much ‘more significant anthropogenic threat’ than other factors (e.g., construction with loss of habitat, pollution, road traffic kills, etc.) are ... ridiculous, in that there are rarely estimates of deaths of birds/mammals/amphibians to such factors to compare with.”⁸
- Predators — cats included — tend to prey on the young, the old, the weak and the unhealthy. At least two studies have investigated this phenomenon in detail, revealing that birds killed by cats are, on average, significantly less healthy than birds killed through non-predatory events (e.g., collisions with windows or cars).⁹

TNR opponents claim...

Free-roaming cats pose a serious public health threat to humans, domestic animals and wildlife.

The reality is...

- “Over the last 100 years, rabies in the United States has changed dramatically. More than 90 percent of all animal cases reported annually to [the Centers for Disease Control and Prevention] now occur in wildlife.... The number of rabies-related human deaths in the United States has declined from more than 100 annually at the turn of the century to one or two per year in the 1990’s. Modern day prophylaxis has proven nearly 100 percent successful.”¹⁰
- Of the 49 U.S. rabies cases reported in humans since 1995, 10 were the result of dog bites that occurred outside of the country; the remainder were traced either to wildlife or were of unknown origins.¹¹ Since 1960, only two cases of human rabies have been attributed to cats.¹²

- While it's true that the number of rabies cases reported in cats has risen in recent years, this trend reflects neither the prevalence of rabies nor the threat of human exposure because the way in which rabies cases are reported to the CDC varies widely.¹³
- Sterilizing free-roaming cats (common practice in most TNR programs) not only reduces the risk of transmission from domestic animals to humans, but also serves as a barrier between wildlife and humans. And a 2012 nationwide survey of "feral cats groups" conducted by Alley Cat Rescue revealed that 96 percent of the groups provide rabies vaccinations as part of their TNR programs.¹⁴
- Although a large number of free-roaming cats may test positive for toxoplasmosis, the majority won't actually be infected with the *T. gondii* parasite. The infectious spores, passed in a cat's feces, are generally "shed" only once during a cat's lifetime over a one-week period.

TNR opponents claim...

The population of feral cats in the U.S. may be as high as 120 million and growing.

The reality is...

- It's extraordinarily difficult to estimate the number of free-roaming cats, in part because of the difficulties involved in determining whether a particular cat is a pet, a stray or feral. Although some researchers have suggested that the number of unowned free-roaming cats may approach the number of pet cats in the U.S. (86.4 million in 2012¹⁵), this estimate is based on small-scale surveys conducted 10 or more years ago.¹⁶
- It has also been argued that the population "probably peaked in 1993 or 1994 before beginning a downward trend," and, as of 2003, varied seasonally from a low of 13 million to a summertime high of 24 million.¹⁷ And, more recently, that TNR is holding the "feral cat population at the present level" of six million in the winter "with a summer high of about 12 million."¹⁸

TNR opponents claim...

Outdoor cats live short, brutal lives.

The reality is...

- Although it's generally acknowledged that more than half of kittens born "in the wild" don't survive into adulthood,¹⁹ kittens born into managed colonies (which can happen before all the cats in the colony are sterilized) are often adopted by caretakers, or caretakers find homes for them through local rescue organizations.
- Caretakers often report of cats living long, healthy lives in managed colonies. More than half of the 23 cats living continuously on the University of Central Florida campus during an 11-year observation period were estimated to be 6.8 years old or older.²⁰
- A 2012 nationwide survey conducted by Alley Cat Rescue revealed similar longevity: One quarter of TNR organizations responding to the survey had colony cats in the 6–8 year range and 35 percent had cats in the 9–12 year range, with 14 percent caring for cats 13 years of age or older.²¹
- Restricting or prohibiting TNR would only worsen the odds for kittens to be born to community cats. Indeed, because these cats would likely be unsterilized, there would be more of them. And, in the absence of TNR, it's unlikely that these kittens would find their way into adoption programs (which typically offer medical care). And the number of such cases is significant: It's been suggested that perhaps one-third of pet cats are "recruited from the feral population."²²

TNR opponents claim...

TNR encourages the abandonment of pet cats and kittens.

The reality is...

- Although it's true that TNR programs are sometimes faced with the unfortunate (and illegal) dumping of cats and kittens at colony feeding sites, there's simply no evidence to suggest that these cats and kittens would not have been dumped anyhow.
- Cats abandoned near a managed colony are far more likely to be adopted and/or sterilized and vaccinated, thereby mitigating their potential impact on the overall population of unowned cats (as well any potential impacts on wildlife and the environment).

TNR opponents claim...

Free-roaming cats cause \$55.5 trillion in damage each year to the U.S. economy. The economic impact of cats killing birds could be as much as \$15,000 per bird.

The reality is...

- If these numbers were true, the economic impact of cats killing birds would exceed our nation's \$16.4 billion national debt *three times over*.
- The same research that cites the \$15,000 per bird figure estimated "the economic value of a feral cat to society" to be \$0 (despite caretaker expenditures estimated to be more than \$1,600 annually for food and veterinary care).²³

- ¹ Levy, J.K., Gale, D.W., and Gale, L.A. "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*. 2003. 222(1): p. 42 – 46.
<http://avmajournals.avma.org/doi/abs/10.2460/javma.2003.222.42>
- ² Stoskopf, M.K., and Nutter, F.B. "Analyzing Approaches to Feral Cat Management—One Size Does Not Fit All." *Journal of the American Veterinary Medical Association*. 2004. 225(9): p. 1361 – 1364. <http://www.ncbi.nlm.nih.gov/pubmed/15552309>
- ³ Nutter, F.B. *Evaluation of a Trap-Neuter-Return Management Program for Feral Cat Colonies: Population Dynamics, Home Ranges, and Potentially Zoonotic Diseases*, in Comparative Biomedical Department. 2005, North Carolina State University: Raleigh, NC. p. 224.
http://www.carnivoreconservation.org/files/thesis/nutter_2005_phd.pdf
- ⁴ Natoli, E., et al. "Management of Feral Domestic Cats in the Urban Environment of Rome (Italy)." *Preventive Veterinary Medicine*. 2006. 77(3-4): p. 180 – 185. <http://www.sciencedirect.com/science/article/B6TBK-4M33VSW-1/2/0abfc80f245ab50e602f93060f88e6f9>
- ⁵ Loss, S.R., et al. "The Impact of Free-Ranging Domestic Cats on Wildlife of the United States." *Nature Communications*. 2013. 4(1396).
<http://www.nature.com/ncomms/journal/v4/n1/full/ncomms2380.html>
- ⁶ Rich, T.D., et al. *Partners in Flight North American Landbird Conservation Plan*. 2004, Cornell Lab of Ornithology: Ithaca, NY.
http://www.partnersinflight.org/cont_plan/
- ⁷ Blancher, P.J., et al. *Guide to the Partners in Flight Population Estimates Database. Version: North American Landbird Conservation Plan 2004*. Partners in Flight Technical Series No 5, 2007.
- ⁸ Wolf, P. "Debunking the Smithsonian's 'Killer Cat Study'." *Petfinder*. 2013.
<http://www.petfinder.com/blog/2013/02/debunking-the-smithsonians-killer-cat-study/>
- ⁹ Møller, A.P., and Erritzøe, J. "Predation Against Birds with Low Immunocompetence." *Oecologia*. 2000. 122(4): p. 500 – 504.
<http://www.springerlink.com/content/ghnny9mcv016ljd8/>; Baker, P.J., et al. "Cats About Town: Is Predation by Free-Ranging Pet Cats *Felis catus* Likely to Affect Urban Bird Populations?" *Ibis*. 2008. 150: p. 86 – 99.
<http://www.ingentaconnect.com/content/bsc/ibi/2008/00000150/A00101s1/art00008>
- ¹⁰ "Rabies in the U.S.: Public Health Importance of Rabies." Centers for Disease Control and Prevention. 2013.
<http://www.cdc.gov/rabies/location/usa/index.html>
- ¹¹ "Human Rabies." Centers for Disease Control and Prevention. 2012. http://www.cdc.gov/rabies/location/usa/surveillance/human_rabies.html
- ¹² "Recovery of a Patient from Clinical Rabies — California, 2011." *Morbidity and Mortality Weekly Report*. Centers for Disease Control and Prevention. 2012. 61(4): p. 61 – 64. <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6104a1.htm>
- ¹³ Blanton, J.D., et al. "Rabies Surveillance in the United States During 2008." *Journal of the American Veterinary Medical Association*. 2009. 235(6): p. 676–689. <http://www.ncbi.nlm.nih.gov/pubmed/19751163>
- ¹⁴ Alley Cat Rescue. "Alley Cat Rescue's National Feral Cat Survey." *PR Newswire*. 2012.
<http://www.prnewswire.com/news-releases/alley-cat-rescues-national-feral-cat-survey-157263395.html>
- ¹⁵ APPA. "Industry Statistics & Trends: Pet Ownership." *2011 – 2012 APPA National Pet Owners Survey*. 2012.
http://www.americanpetproducts.org/press_industrytrends.asp
- ¹⁶ Levy, J.K., Gale, D.W., and Gale, L.A., "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*. 2003. 222(1): p. 42 – 46.
<http://avmajournals.avma.org/doi/abs/10.2460/javma.2003.222.42>
- ¹⁷ Clifton, M. "Where Cats Belong — and Where They Don't." *Animal People*. June 2003.
<http://www.animalpeoplenews.org/03/6/wherocatsBelong6.03.html>
- ¹⁸ Clifton, M. "Feral Cat Neuter/Return Results Appear to Have Plateaued." *Animal People*. July/August 2012. p. 13.
<http://www.animalpeoplenews.org/10/4/April10.htm>
- ¹⁹ Levy, J.K., Gale, D.W., and Gale, L.A., "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*. 2003. 222(1): p. 42 – 46.
<http://avmajournals.avma.org/doi/abs/10.2460/javma.2003.222.42>
- ²⁰ *Ibid*. <http://avmajournals.avma.org/doi/abs/10.2460/javma.2003.222.42>
- ²¹ Alley Cat Rescue. "Alley Cat Rescue's National Feral Cat Survey." *PR Newswire*. 2012.
<http://www.prnewswire.com/news-releases/alley-cat-rescues-national-feral-cat-survey-157263395.html>
- ²² Clifton, M. "Where Cats Belong — and Where They Don't." *Animal People*. June 2003.
<http://www.animalpeoplenews.org/03/6/wherocatsBelong6.03.html>
- ²³ Lohr, C.A., Cox, L.J., and Lepczyk, C.A. "Costs and Benefits of Trap-Neuter-Release and Euthanasia for Removal of Urban Cats in Oahu, Hawaii." *Conservation Biology*. 2012. <http://dx.doi.org/10.1111/j.1523-1739.2012.01935.x>