



## Problems with Trap-Neuter-Release

Trap-neuter-release, or TNR, is touted by some as a humane solution to the problems posed by feral cats (*Felis catus*). In this approach, cats are trapped in cage or box traps, marked with a clipped ear, sterilized, and then returned to a feral cat colony. **While TNR promoters claim it will reduce cat populations, the science tells us that TNR puts wildlife in peril while failing to bring cat populations under control or address related health concerns.**

TNR is presented as a way to humanely stabilize and decrease cat populations. Many studies have found that TNR as a management tool fails to do so.<sup>1,2,3,4,5,6</sup> Its advocates describe cats as territorial animals that stay in their home range and keep new cats out. In fact, resident cats do not keep newcomers from feeding or joining the colony, and enough cats are dumped illegally or attracted to the food supply at TNR colonies to outweigh losses due to death or adoption.<sup>7</sup> A study on Catalina Island, California, monitored the movements of sterilized and intact cats from managed colonies, and found no difference in the range sizes of the two groups. Cats still moved away from the feeding stations into the more rugged adjacent lands, decreasing the feasibility of trapping all animals and increasing their ecological impact.<sup>8</sup>



*A feral cat in poor health, trapped in East Brunswick, New Jersey.  
Photo Credit: David Blumig*

It appears that the majority of TNR cats are not vaccinated, creating a major public health concern. Jessup (2004) cites the actions of Maddie's fund, a pet rescue organization, which paid members of the California Association of Veterinary Medicine to neuter or spay feral cats, but did not require them to vaccinate or otherwise treat the cats. Ultimately, over 90,000 cats were released without rabies vaccinations.<sup>9</sup>

Managed cat colonies are often claimed to be the cheapest form of control for areas with feral cats. In Akron, Ohio, nearly 2,500 cats were trapped from public parks. Of these, approximately 500 were adopted while the remaining 2,000 feral, diseased, or injured cats were euthanized. The entire project cost less than \$27,000.<sup>10</sup> At the costs paid by Maddie's Fund in California (\$50/neuter, \$70/spay), sterilizing just 500 cats would cost approximately \$30,000, in addition to the costs of trapping, euthanasia for the sick or injured, and subsequent feeding of all the rest.

TNR supporters insist that removing cats will create a vacuum effect allowing even more cats to move into the area. Winter (2004) outlines several examples in which removal of cats and feeding stations eliminates or nearly eliminates local cat populations and is followed by the return of native bird species.

According to TNR promoters, feral cat colonies also provide natural rodent control. However, one peer-reviewed study found that the house mouse (*Mus musculus*) was more common in parks with managed cat colonies, leading the authors to conclude that cats upset the balance of rodent populations and could lead to the expansion of house mice into previously unoccupied ranges.<sup>11</sup>

One claim is that humans, not cats, are the cause of declining bird populations, and focusing on cats distracts conservationists from the real problem. Certainly habitat loss and fragmentation have pushed birds and other native species to the brink, amplifying the effects of an invasive predator like the domestic cat, which can easily cause local extirpations of species with diminished ranges and populations. In fact, studies have found that cat-related mortalities among birds approach or exceed best estimates of the entire local bird population.<sup>12,13</sup> Wildlife professionals and managers can and should address all legitimate threats to wildlife.

TNR does not live up to the many promises its proponents make: it has been shown to fail at decreasing feral cat populations, protecting native wildlife, addressing public concerns, controlling pests, and reducing costs. Clearly, this misguided management tool should be uniformly rejected.

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<sup>1</sup> Baker, P.J., S.E. Molony, E. Stone, I.C. Cuthill, and S. Harris. 2008. Cats about town: is predation by free-ranging pet cats *Felis catus* likely to affect urban bird populations? *Ibis* 150: 86-99.

<sup>2</sup> van Heezik, Y., A. Smyth, A. Adams, and J. Gordon. 2010. Do domestic cats impose an unsustainable harvest on urban bird populations? *Biological Conservation* 143: 121-130.

<sup>3</sup> Andersen, M. C., B. J. Martin, and G. W. Roemer. 2004. Use of matrix population models to estimate the efficacy of euthanasia versus trap-neuter-return for management of free-roaming cats. *Journal of the American Veterinary Medical Association* 225:1871–1876.

<sup>4</sup> Barrows, P. L. 2004. Professional, ethical, and legal dilemmas of trap-neuter-release. *Journal of the American Veterinary Medical Association* 225:1365–1369.

<sup>5</sup> Castillo, D., and A. L. Clarke. 2003. Trap/neuter/release methods ineffective in controlling domestic cat “colonies” on public lands. *Natural Areas Journal* 23:247–253.

<sup>6</sup> Longcore, T., C. Rich, and L. M. Sullivan. 2009. Critical assessment of claims regarding management of feral cats by trap-neuter-return. *Conservation Biology* 23:887–894.

<sup>7</sup> Nutter, F. B. 2005. Evaluation of a trap-neuter-return management program for feral cat colonies: population dynamics, home ranges, and potentially zoonotic diseases. *PhD dissertation*, North Carolina State University. Raleigh, NC.

<sup>8</sup> Roberto, P. 1995. Whose right to live? The cat rescue movement versus wildlife defenders. *California Coast and Ocean*. 11:31–40. Available from: [http://www.dfg.ca.gov/wildlife/nongame/nuis\\_exo/dom\\_cat/cat.html](http://www.dfg.ca.gov/wildlife/nongame/nuis_exo/dom_cat/cat.html)

<sup>9</sup> Winter 2004. Trap-neuter-release programs: the reality and the impacts. *Journal of the American Veterinary Medical Association* 225(9): 1369-1376.

<sup>10</sup> Gutilla, D.A., and P. Stapp. 2010. Effects of sterilization on movements of feral cats at a wildland–urban interface. *Journal of Mammalogy* 91(2):482–489.

<sup>11</sup> Hawkins CC, Grant WE, Longnecker MT. 1999. Effect of subsidized house cats on California birds and rodents. *Transactions of the Western Section of The Wildlife Society* 35:29–33.

<sup>12</sup> Segna D.L., R. Schumacher. 2002. Success of the California feral cat altering program. *Proceedings. 139th Annual Convention American Veterinary Medical Association*. 2002; 690.

<sup>13</sup> Winter 2004. Trap-neuter-release programs: the reality and the impacts. *Journal of the American Veterinary Medical Association* 225(9): 1369-1376.