

FERAL AND FREE-RANGING DOMESTIC CAT IMPACTS TO WILDLIFE OF CONCERN TO THE NORTH AMERICAN BLUEBIRD SOCIETY (NABS)

Background:

Domestic cats (*Felis catus*) are predators that humans introduced globally and have been listed among the 100 worst non-native invasive species in the world (Loss *et al.*, 2013). Although cats can make wonderful pets, feral cats or un-owned cats are one of the world's most harmful invasive species. Every year, cats kill billions of birds in the United States and are known to spread a variety of parasites and diseases. In regard to wildlife, cats are the number one source of direct, human-caused mortality for birds and small mammals. Cats also kill small reptiles and amphibians, (e.g., lizards, frogs and toads). Of the total wildlife deaths attributed to cats, studies show that feral cats or un-owned do the most harm and are responsible for about two-thirds of the bird kills and approximately 90 percent of the small mammals. The predation rate estimate for un-owned cats was higher primarily due to predation rates by this group averaging three times greater than rates for owned cats. Un-owned cats are defined to include farm/barn cats, strays that are fed by humans but not granted access to habitation, cats in subsidized colonies and cats that are completely feral. Scientifically sound conservation and policy intervention is needed to reduce this impact (Loss *et al.*, 2013).

Cats are a human caused, direct source of mortality and feral cats are a growing concern for communities and land managers nationwide. Advocates for feral cats often favor Trap, Neuter, Release (TNR) programs to address issues regarding overpopulation and disease exposures of feral or abandoned cats. These programs remain controversial, especially with wildlife advocates and managers, because they are not effective in reducing feral cat numbers. Overwhelmingly, the scientific literature indicates that TNR programs don't work. A January 28, 2014 letter to the U.S. Department of the Interior from the American Bird Conservancy (ABC) detailed the impacts of feral cat colonies to wildlife (Loss *et al.*, 2013). This letter was written on behalf of 200 conservation organizations that are represented across North America. The letter discussed a study by the Smithsonian Institute and the U.S. Fish and Wildlife Service that documented extensive wildlife mortality from cat predation, risks to human health from rabies and toxoplasmosis and the ineffectiveness of the TNR program. The peer-reviewed study by scientists found that an estimated 2.4 billion birds and 12.3 billion small mammals are killed by cats in the U.S. every year.

To further identify the magnitude of the issue, of 321 animals (mostly birds) that were injured by cats and brought to WildCare in 2019 (a nonprofit wildlife hospital in San Rafael, California), only 89 survived. The other 232 died despite WildCare's efforts to save them <https://www.nationalgeographic.com/animals/article/caught-by-cats-birds>. This does not account for the numbers of wildlife killed by those cats but not discovered.

Disease issues:

Feral cat colonies pose a threat to human health. According to the Centers for Disease Control and Prevention (CDC), cats are consistently the number one carrier of rabies among domestic animals and disproportionately pose a risk of human exposure to rabies because of the increased likelihood of human-cat interactions (Blanton *et al.*, 2012; Roebeling *et al.*, 2013).

Toxoplasmosis also threatens the health and welfare of people and wildlife. This disease is caused by a parasitic protozoan that depends on cats to complete its life cycle. Up to 74 percent of all cats will host the toxoplasmosis causing parasite in their lifetime and shed hundreds of millions of infectious eggs (Tenter *et al.*, 2000). In the U.S. over a million people are infected with Toxoplasmosis each year. Any direct or indirect contact with cat feces risks human and wildlife health, including death. The disease is the most common cause of ocular inflammation and may result in blindness. Toxoplasmosis has historically been recognized as a risk for pregnant women and individuals with compromised immune systems, but new research is showing it causes problems in otherwise healthy populations as well. Potential results in pregnant women can be: a miscarriage, a stillborn child or a child born with signs of congenital toxoplasmosis (e.g., abnormal enlargement or smallness of the head) (www.cdc.gov/parasites/toxoplasmosis).

“The best way to manage infectious disease risks from cats - whether it be toxoplasmosis, rabies, or any other disease - is to keep cats safely contained indoors, on a leash, or in a catio (<https://abcbirds.org/catio-solutions-cats/>). Permitting cats, especially stray and feral cats, to roam the landscape increases risks to the whole community, human and animal alike” (Grant Sizemore, ABC’s Director of Invasive Species Program.

Attempts to control feral cats by Trap, Neuter and Release:

TNR programs fail to reduce cat populations and cannot be relied upon as a management tool to remove cat colonies or protect people and wildlife. Multiple peer-reviewed studies, including the CDC’s, have found that TNR programs do not adequately reduce feral cat populations or effectively mitigate health concerns (Roebeling *et al.*, 2013; Castillo *et al.*, 2003; Natoli *et al.*, 2006). TNR programs fail because they do not operate in an enclosed system and cannot spay or neuter a sufficient number of cats to affect cat numbers at the population level. Despite the good intentions of many involved in TNR programs, TNR has been found to be a waste of time, money, and resources. Cat colonies may actually lead to increased numbers of cats. The only sure way to simultaneously protect wildlife and people is to remove feral cats from the landscape (<https://abcbirds.org/wp-content/uploads/2015/05/The-Evidence-Against-TNR.pdf>).

Recommendations to address free-ranging and feral cats:

- * Educating the public on the issues and potential solutions are key to helping communities understand the best approach to resolving the problems posed by outdoor cats.
- * Support the American Bird Conservancy’s “Cat’s Indoors” program (<https://abcbirds.org/program/cats-indoors/>).
- * Support removal of cat colonies in close proximity to shorelines, natural wetlands, undeveloped forested areas, areas managed for wildlife, parks and other open space, or sensitive areas supporting concentrations of threatened or endangered species, migratory birds, or other native wildlife.
- * Avoid outdoor feeding of stray or free-ranging cats. This attracts skunks, raccoons, foxes and other species that can contract and/or spread rabies.
- * Encourage microchipping of all cats. Microchipping facilitates cat registration, helps in identifying owners of lost cats, and aids in identifying cat owners or facilities not in compliance with regulations and/or accountable for death or injury to threatened and endangered species, migratory birds, or other native wildlife.
- * Encourage the use of CatBibs on outdoor cats as an interim solution while transitioning cats to be indoors.
- * Promote or encourage enforcement of “no animal abandonment” statutes and establish stricter penalties for violators. Work with animal welfare and conservation groups to provide a low-cost solution for pet-owners who are no longer willing or able to care for their pets.
- * Support efforts of volunteers or organizations that trap and neuter free-ranging cats, but also require that animals be adopted, and **kept indoors or allowed only in fenced-in areas** or appropriately-sized enclosures (also known as “catios”).
- * Where necessary, promote an annual census of all cats. A census conducted within a municipality will establish a base line that helps evaluate programs to address free-ranging cats.
- * Promote municipal licensing of all cats and prohibit free-ranging cats with leash laws similar to those in existence for dogs.

Summary:

BETTER FOR CATS, BETTER FOR HUMANS, BETTER FOR WILDLIFE

The best way to protect cats and birds is to keep cats safely contained. However, if you are in the process of transitioning your outdoor cat to an indoor cat or just want to add an extra layer of wildlife protection while your cat is in the backyard enclosure, several devices can help reduce (but not eliminate) cat predation. Review the latest science at https://abcbirds.org/wp-content/uploads/2019/12/Table_anti-predation_device_science.pdf

Supporting the listed recommendations is a win-win-win situation:

- * Indoor cats live a longer, healthier life because they are less subject to diseases, predation, poisoning or death by vehicles.

- * The threat of rabies and toxoplasmosis to people and pets is reduced.
- * Wildlife predation can be significantly reduced.

The science is clear and the solutions are equally clear - to protect humans and wildlife, cats need to be kept contained. NABS supports keeping all cats indoors, or allowing them outside only if they are on a harness and leash. NABS does not support maintaining feral cat colonies.

The bottom line: **Domestic cats, whether pets or feral, should not be allowed to roam free.**

Literature Cited

<https://abcbirds.org/program/cats-indoors/>

American Bird Conservancy. undated. *Toxoplasma gondii*: A One Health Problem 4 pp.

Blanton J.D., J. Dyer, J. McBrayer, and C.E. Rupprecht. 2012. Rabies surveillance in the United States during 2011. *Journal of the American Veterinary Medical Association* 241: 712-722

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.

<https://www.cdc.gov/parasites/toxoplasmosis/disease.html>

<https://www.nationalgeographic.com/animals/article/caught-by-cats-birds>

Loss S.R., T. Will, and P.P. Marra. 2013. The impact of free-ranging domestic cats on wildlife of the United States. *Nature Communications* 4:1396.

Natoli E., L. Maragliano, G. Cariola, A. Falini, R. Bonnani, S. Cafazzo, and C. Fantini. 2006. Management of feral domestic cats in the urban environment of Rome (Italy). *Preventive Veterinary Medicine* 77:180-185.

Roebeling A.D., D. Johnson, J.D. Blanton, M. Levin, D. Slate, G. Fenwick, and C.E. Rupprecht. 2013. Rabies prevention and management of cats in the context of Trap-Neuter-Vaccinate-Release programs. *Zoonoses and Public Health* doi: 10.1111/zph.12070.

Tenter A.M., A.R. Heckeroth, and L.M. Weiss. 2000. *Toxoplasmosis gondii*: from animals to humans. *International Journal for Parasitology* 30:1217-1258