

November 3, 2022

Recipient Name  
Organization Name  
Address

Dear (Prefix) (Surname):

The undersigned veterinarians, animal protection groups, and scientists urge you to prioritize the use of trap-neuter-return (TNR) in all matters relating to the management of feral cat populations.

TNR is the process of trapping, spaying/neutering, vaccinating against rabies and other diseases, and then returning the cats back to their outdoor homes. TNR stops the breeding cycle of outdoor cats and causes their numbers to decrease naturally over time. Eradication is ***less effective*** and ***more costly*** than TNR.

Catching and killing cats is a temporary solution. Though it may result in fewer cats within a target area quickly, the feral cat population will unquestionably rebound. A primary weakness of eradication programs, especially those on a large scale, is that it is close to impossible to determine if all targeted subjects have been killed, let alone identified, and when they are not, the breeding cycle will repopulate the area. A mistaken assumption that eradication is complete when it really isn't can have disastrous consequences: "the species can bounce back and even expand its range, causing environmental and economic damage, and rendering the initial eradication campaign redundant" (Rout et al., 2013). Subsequent eradication campaigns will be necessary, increasing the cost of ridding an area of cats. Note that cats are especially prolific breeders and can reproduce at as young as four months of age, so a handful of undetected, unsterilized cats can multiply more quickly than many other species.

When cats are trapped and removed from an area, new cats quickly move in to fill the vacated territory and take advantage of the resources that had been sustaining the cats there before them and start the breeding process all over again. This phenomenon was discovered by British biologist Roger Tabor and is referred to as the "vacuum effect" (Tabor, 1983). In contrast, if a colony of cats is "neutered and returned to its area it will continue to hold the location and keep other cats out by its presence" (Tabor, 1995).

Take as an example the 2015 study conducted by Lazenby et al. in the forests of Tasmania, Australia, where "low-level culling of feral cats" actually caused an *increase* in the number of cats in the area, despite the initial illusion that there was a decrease in population. Over the course of 13 months, researchers attempted to "simulate the resource-effort that typically might be available to and expended by natural resource managers," which entailed trapping cats and shooting them in the head (Lazenby et al., 2015). At the end of the study, researchers noted a significant *increase* in feral cat numbers with an average of 75 percent at one site and 211 percent at the other site. It was

also noted that “cat numbers fell, and were comparable with those in the pre-culling period, when culling ceased” (Lazenby et al., 2015).

Eradication is, as explained, most often ineffective; it can also be counterproductive by upsetting the balance between nonnative predator and prey species that has developed over time in isolated environments, such as islands. This often has catastrophic consequences for local ecosystems. As Dr. Niels Pedersen, Director of the Center for Companion Animal Health at the University of California-Davis, explains, “What people don’t understand is that cats are the dominant carnivore in almost all human-oriented ecosystems...Every attempt to take cats out of the equation has led to disastrous ecological shifts as far as buildup of rodents as well as other over-populated species.”

In 1997, the majority of the cat population on Macquarie Island was culled, with the result that the rat and rabbit populations exploded, devastating the landscape. Rats fed on baby birds and eggs, decimating ground-nesting bird populations that the cat culling was meant to protect (Strickland, 2009). Rabbits destroyed the island’s vegetation, which resulted in decreased materials for birds to build nests and left the native penguin population exposed and more susceptible to predators. Scientists then spent seven years eradicating the rats, mice, and rabbits to combat their increased predation on birds (Strickland, 2009; Australian Department of the Environment, 2009).

On Wake Atoll, part of the Pacific Islands, a U.S. military nearly eradicated the cat population in 2008 and the rat population subsequently increased dramatically (Rauzon et al., 2008). A 2012 campaign to remove all the rats from the island via poisoned bait failed to completely kill them off. In the years since, resources have been spent on trying to control the rat population and, as recently as February 2022, a final attempt at total eradication has been proposed (Mauser, 2022).

Marion Island provides yet another real-world example of why removing cats from an enclosed ecosystem does more harm than good to that ecosystem. After the 19-year long cat-culling campaign, the mouse population exploded and, as on Macquarie Island under the same circumstances, chicks of endangered bird species began falling prey to the mice (Clifton, 2018). It is worth noting that the mode by which mice or rats kill live chicks is much less efficient than a cats’. Cats kill most of their prey quickly before consuming it, whereas the mice nibble away at the helpless chicks, leaving the unfortunate animals to ultimately die over time from the bite wounds (Clifton, 2018). Now, the same groups that wanted the island’s cats eliminated to protect the seabirds is calling for the extermination of all mice from Marion through the “Mouse-Free Marion Project” which claims that doing so will (*Saving Marion Island’s Seabirds*). The project is expected to cost \$2.1 million (“Sponsor a Hectacre”).

Eradicating feral cats is a futile endeavor that comes with a hefty price tag — at the expense of the taxpayer — and requires decades of continual killing, often followed by further expenses to eradicate rats or other prey animals the cats had kept in check. It took over 15 years and cost AU\$3.5 million (about \$2.5 million USD) to eradicate the 2,500 cats on Macquarie Island (which is only 21 miles long and 3 miles wide), with another AU\$24.7 million (about \$20.2 million USD) allocated to eradicating the rats and rabbits over seven years (Veitch et al., 2011). Marion Island is only 15 miles long and 10 miles wide, yet it took 19 years to kill 3,400 cats (Bester et al., 2002). Additionally, it

cost \$1.3 million to eradicate the cats living on Ascension Island (located in the South Atlantic Ocean), which is only 34 square miles (Veitch et al., 2011). These eradication programs that are deemed "successful" within the scientific community have been carried out on small, isolated islands with little to no human habitation. Attempting to eradicate an entire population of feral cats on a continent, with far more variables and unpredictable outcomes, would be futile.

We hope that you will take the factual evidence into consideration should plans for a feral cat eradication program by any group or legislative body come to your attention.

Please contact Alley Cat Rescue if you need any further information.

Sincerely,

Louise Holton  
President, Founder  
Alley Cat Rescue, Inc.  
[laholton@aol.com](mailto:laholton@aol.com)  
301-277-5595

**And on behalf of:**

Theresa McAuley  
President  
Feral Fixers  
Lombard, IL, USA

Cindy Minghelli  
Director & Founder  
Fat Kitty City  
El Dorado Hills, CA, USA

Kelli DeCora  
Intake Coordinator/TNR Coordinator  
Laramie Animal Welfare Society  
Laramie, WY, USA

Carmen Mason  
President  
Cat Haven Rescue, Inc.  
Tampa, FL, USA

Janet Williams  
President  
Marin Friends of Ferals  
San Rafael, CA, USA

Sharon Johnson  
President & Founder  
Alliance for Humane Action  
Lindenhurst, IL, USA

Joelle Dumont  
Epidemiologist  
Los Angeles, CA, USA

Andrew Linzey  
Professor the Revd. Dr.  
Oxford Centre for Animal Ethics  
Oxford, UK

Dawn Pfendler  
CEO  
Hawaii Animal Rescue Foundation  
Wailuku, HI

Kandi Habeb  
President  
Save a Kitty Feral Cat Program  
Parkersburg, WV, USA

Betsy Ballenger  
Executive Director  
Cat Action Team  
Charlottesville, VA, USA

Tracey Mccuaig  
Vice President  
Greater Victoria Animals Crusaders  
Victoria, BC, Canada

Colleen Falcone  
President  
The Starfish Alliance, Inc  
Brighton, MI, USA

Cynthia Burke  
President/Founder  
Bee Holistic Cat Rescue and Care  
San Francisco, CA

Dr. Natasha Lee  
Animal Welfare Consultant  
Asia Animal Happiness Consultancy  
Selangor, Malaysia

Peggy Simon  
Managing Director  
Valley Cats Inc.  
Westlake Village, CA, USA

Patterson Clint  
Advocate  
Pedro Pet Pals Animal Rescue  
Rolling Hills, CA, USA

Patricia Gayle Guthrie  
Founder/Director  
Stray Love Foundation, Inc.  
Magnolia Springs, AL, USA

Gabriele Barrie  
M.D.  
Pound Rescue  
Okotoks, AB, Canada

Dr. Susan Aylott  
Veterinarian  
Abu Dhabi, UAE

Donna Petryna  
S.A.R.A. Society  
Surrey, BC, Canada

Helen Sinclair, MBE  
Founder  
Friends of the Animals Registered Charity  
Isle of Wight, UK

Priscilla Deschamps  
Owner  
Pat Brody Shelter for Cats, Inc.  
Lunenburg, MA, USA

Joan Miller  
Chair, Community Outreach and Education  
Cat Fanciers' Association  
San Diego, CA, USA

Anja Bull  
Treasurer  
Community Cat Connection, Inc.  
Putnam, CT, USA

Cindy Ingram  
President  
Casey's House, Inc.  
Bluemont, VA, USA

Jayne Rosenthal  
Founder  
Northeast Animal Rescue  
Philadelphia, PA, USA

Terri Alice  
President  
Catnip Society  
Mariposa, CA, USA

Laura Shattuck  
Foster Coordinator, board member  
Central Coast Humane Society  
Depoe Bay, OR, USA

Holly Thoms  
Licensed Veterinary Technician  
Voiceless-MI  
Eaton Rapids, MI, USA

Jo-Ann Preen  
President  
Preen Acres Cat Sanctuary, Inc.  
Live Oak, FL, USA

Diana Kliche  
CEO  
The Fix Project  
Long Beach, CA, USA

Cindy Lauer  
President & Co-Founder  
Whiskers-n-Paws  
Newnan, GA, USA

Myra Elizabeth Clements  
Pharmacist  
ThreeChoptVet  
Richmond, VA, USA

Darlene Kubik  
President  
Hilltop Humane  
Weymouth, MA, USA

Kathy Pate  
Fleetwood Branch Secretary  
Prevent Unwanted Pets  
Fleetwood, UK

Diana Nolen  
President  
Stop The Overpopulation of Pets  
Mansfield, OH, USA

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Director/President  
Northern Colorado Friends of Ferals  
Fort Collins, CO, USA

Lynne Scott  
Executive Director  
Craig Street Cats, Inc.  
Winnipeg, MB, Canada

Sue Birch  
Executive Director  
Stray Feral Rescue  
Amery, WI, USA

Sarah Moore  
Clinic Manager  
Animal Protective League of Springfield  
and Sangamon County  
Springfield, IL, USA

Ingrid K Loeffler  
Kalamazoo Humane Society  
Medical Director  
Kalamazoo, MI, USA

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Heart and Hand Society  
New York City, NY, USA

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Founder  
Cat Pals, Inc.  
Hollywood, CA, USA

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Director  
Rescue Siamese  
Winnipeg, MB, Canada

Kathy Asling  
Director  
The Animal Guardian Society  
Blackstock, ON, Canada

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Director  
Mid-Ohio Animal Welfare League  
Cleveland, OH, USA

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Citizen Advocates for Animals, Inc.  
Lakeway, TX, USA

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Director  
Mew Cat Rescue  
Betonville, AR, USA

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Freedoms Last Chance Inc.  
Founder  
Wirtz, VA, USA

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Director  
Green House Cat Sanctuary  
Eureka, USA

Karen Van Scoyk  
Emerald Shores Veterinary Clinic and Spa  
Santa Rosa Beach, FL, USA

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Founder  
Passion For Pachyderms  
Waccabuc, NY, NYC

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Co-Founder  
A Purrfect JC  
Jersey City, NJ, USA

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Santa Barbara, CA, USA

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SPAN Spay Neuter Animal Network  
Ventura, CA, USA

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A Voice For All Paws  
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President  
Argos Animal Rescue & Protection  
Association  
Larnaca, Cyprus, Greece

Judy Roth  
Rescuer  
Florence Humane Society  
Florence, OR, USA

Steven Mason Myers  
Director  
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Apple Valley, CA, USA

Felicia Reynolds  
Founder  
Kittie Komittee  
MT, USA

Stella Stylianou  
President  
Argos Animal Rescue & Protection  
Association  
Larnaca, Cyprus, Greece

Deborah Ackerman  
Adj. Assoc. Prof. of Epidemiology  
Portland, OR, USA

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Registered Veterinary Technician  
Westerville, OH, USA

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Founder & Chairperson  
Harties Feral Cat Rescue NPO  
North West Province, South Africa

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Change For The Better Foundation  
Capetown, South Africa

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Practice Manager  
Oudtshoorn Veterinary Clinic  
Oudtshoorn, South Africa

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Nine Lives Greece  
Athens, Greece

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Neutering Manager  
Cats Protection  
Watford, UK

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Feral Watch And TNR  
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Voice for Animals  
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Humane Society of Somerset County  
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Clear Creek Cat Rescue  
Fritz Creek, AK, USA

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Allen County Animal Rescue Facility  
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Taos Feral Feline Friends  
Ranchos De Taos, NM, USA

Lisa Voigt  
Shelter Manager  
St. Francis Animal Rescue of Venice  
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Heartsong Spay Neuter Clinic  
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Alter-Ations Inc.  
Viroqua, WI, USA

Alexandria Borowczyk  
Practice Manager  
Spay and Neuter of SLC  
Murray, UT, USA

Fred Saad  
Veterinarian  
El Toro Animal Hospital  
Lake Forest, CA, USA

Cynthia C. Burke  
President/Founder  
Bee Holistic Cat Rescue and Care  
Richmond, CA, USA

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Executive Director  
Finger Lakes SPCA of Central New York  
Auburn, NY, USA

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Feral Cat Rescue  
Great Mills, MD, USA

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Operations Director  
Cat Haven  
Baton Rouge, LA, USA

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Administrator  
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Conway, NH, USA

Amber Nix  
Shelter Manager  
Hermitage No Kill Cat Shelter  
Tucson, AZ, USA

Victoria O'Malley  
Veterinary Technician  
North Georgia Animal Alliance  
Ringgold, GA, USA

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Board Member  
Branch Area Rescue Coalition  
Quincy, MI, USA

Angeline Fahey  
Community Cat Program Manager  
Humane Society of Southern Arizona  
Community Cat Program  
Tucson, AZ, USA

Regena Dungan Srackangast  
Owner/ TNR Management Specialist  
Tucson Feral & Stray Project  
Tucson, AZ, USA

Valerie Hayes  
President  
North Georgia Animal Alliance  
Ringgold, GA, USA

Dr. Elaine Sipka  
Shelter Veterinarian  
Knox County Humane Society  
Mount Vernon, OH, USA

Cinnamon Hudgins  
Executive Director  
Whidbey Animals' Improvement  
Foundation  
Coupeville, WA, USA

Dot Jones  
Consultant  
Spay and Neuter Solutions  
Tucson, AZ, USA

Chris Davis  
Supervisor  
Maumelle Animal Services  
Maumelle, AR, USA

Mercena Johnson  
Vice President  
Catsnap  
Champaign, IL, USA

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Intake and Foster Coordinator  
Hermitage Cat Shelter  
Tucson, AZ, USA

Sara DeBerry  
Secretary  
North Georgia Animal Alliance  
Ringgold, GA, USA

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Vice President  
SPCA KK  
Kota Kinabalu, Malaysia

Dr. Gail S. Wolfe  
Veterinarian  
Bennett Road Animal Clinic, Inc.  
Okemos, MI, USA

Joseph Martins  
Veterinarian  
Belle Mead Animal Hospital  
Hillsborough, NJ, USA

Deborah C. Martin  
Director  
Friends of Felines-Cape Hatteras Island  
Avon, NC, USA

Karn Myers  
Co-Founder and Executive Director  
FixNation  
Los Angeles, CA, USA

Claudia L Casavecchia, D.V.M  
Medical Director  
Society Hill Veterinary Hospital  
Philadelphia, PA, USA

Linda J Shaffer  
Treasurer  
Branch Area Rescue Coalition  
Coldwater, MI, USA

David Leavitt  
President  
Palm Beach Island Cats Inc.  
Palm Beach, FL, USA

Katrina Johnson  
Registered Vet Tech/Assistant Director  
Columbus Dog Connection  
Columbus, OH, USA

Esther Dzinamarira  
Veterinarian  
Botswana Society for the Prevention of  
Cruelty to Animals  
Gaborone, Botswana

Drs. Adam and Fiona McClure  
Veterinarians  
Northside Veterinary Clinic  
Arlington, VA, USA

Renee T. Nichols  
Asst. Executive Director  
Menifee County Animal Shelter  
Frenchburg, KY, USA

Terry Sarandrea  
Clerk  
Commonwealth Cat  
Peabody, MA, USA

Monika Paulina Ibarra  
Community Cat Trapper  
Humane Society of Southern Arizona  
Tucson, AZ, USA

Jesse Mendia  
Animal Health Supervisor  
Save A Pet  
Grayslake, IL, USA

Marc Bekoff  
Professor emeritus  
University of Colorado  
Boulder, CO, USA

Gina Stefanides  
President  
Feline Rescue Inc.  
Deerfield Beach, FL, USA

Danielle Blasko  
Executive Director  
Little Traverse Bay Humane Society  
Harbor Springs, MI, USA

Katie Powers  
President  
Spay and Neuter Solutions, Inc.  
Tucson, AZ, USA

Joan Schaffner  
Associate Professor of Law  
The George Washington University Law  
School  
Washington, DC, USA

Monica Barker  
CEO  
Cat Network of Stanislaus  
Modesto, CA, USA

Thomas Bove  
Executive Director  
Loudoun Community Cat Coalition  
Leesburg, VA, USA

Stacy LeBaron  
Head Cat  
The Community Cats Podcast  
Warren, VT, USA

Patsy Larson  
Secretary of Board  
Animal Protection and Education  
Boone, IA, USA

Lindalee Anderson  
President  
All Kitty Korner  
Palmetto, FL, USA

Amy Ferguson  
Executive Director  
Feral Cat Spay/Neuter Project  
Lynwood, WA, USA

Wendy Kassel  
President  
Kitty-Kat Rescue  
Clarksville, VA, USA

Sarah Wood  
Community Cat Outreach Manager  
Ohlone Humane Society  
Tracy, CA, USA

Michelle L Balistrieri  
Treasurer  
Homeless Cat Management Team  
Pittsburgh, PA, USA

Mark Nelson  
Executive Director  
Alabama Spay Neuter  
Irondale, AL, USA

Bobbi Dewey  
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Humane Society of Oldham County  
Prospect, KY, USA

Caryl McIntire Edwards  
President  
Voice for Animals  
Harrison, ME, USA

DeDe Barton  
President  
Waseca County Animal Humane Society  
Waseca, MN, USA

Sue Gonzalez  
Director  
Good Shepherd Cat Sanctuary  
Delmar, MD USA

Helene Mullins  
Vice President  
Bedford Humane Society  
Huddleston, VA, USA

John Stephens  
President  
The Purr Project  
New Haven, CT, USA

Gina Jennings  
Community Outreach Manager  
SAFE Haven for Cats  
Raleigh, NC, USA

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## **Appendix: Additional TNR Studies**

### **1) San Francisco, California, USA 2004 - 2020**

From published Abstract: “ A population of 175 community cats, as determined by an initial census...declined by 99.4% over a 16-year period. After the conclusion of the initial count, the presence of cats was monitored as part of the TNR program’s daily feeding regimen. Of the 258 total cats enrolled in the program between 2004 and 2020, only one remained at the end of the program period,” (Sephar and Wolf)

### **2) Key Largo, Florida, USA 1999 - 2013**

A study of the effects of a long-term TNR program on the population of outdoor cats in the Ocean Reef Community was done by analyzing cat census data and medical records of the cats. The study found that the number of free-roaming outdoor cats decreased 55% (from 455 cats to 506 cats) over the period covered by the study (Kreisler et al.).

### **3) Chicago, Illinois, USA 2018**

Data collected on the number of cats within colonies where TNR was practiced showed a mean decline of 54 percent from the start of TNR programs and of 82 percent from peak levels (Sephar and Wolf).

### **4) Rio de Janeiro, Brazil, 2004 - 2008**

Researchers tested the effectiveness of TNR by sterilizing female cats within a colony and counting the total population of the colony between 2004 through 2008. Female cats were TNR’d and the populations were counted every other year within that time frame. When the study began in 2004, there was an estimated population of 40 cats. In 2006, the population was estimated to be 26 cats, and 17 cats in 2008 (Mendes-de-Almeida et al.)

### **5) Cook County, Illinois, USA 2008 - 2012**

This large-scale TNR effort spanned 23 zip codes and achieved a 42% reduction of the total number of colony cats in five years (Funiak and Michalek). The project decreased the number of cats from 1,329 (as of November 2007) to 788 cats by the end of 2012 (Funiak and Michalek). All cats trapped through the project were vaccinated against rabies as well as sterilized. The project’s success was aided by the participation of private nonprofit animal groups that removed and adopted out friendly strays and young kittens.

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