

Return to Field: expanding our tools for free roaming cat management



Dr. Kate Hurley

UC Davis Koret Shelter Medicine Program

Million Cat Challenge

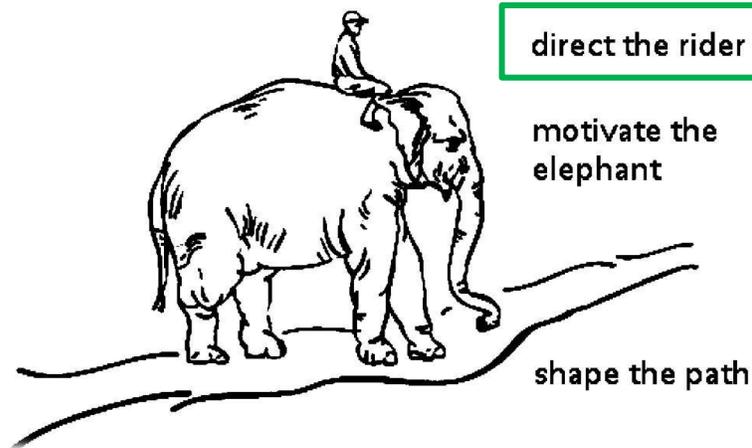
www.sheltermedicine.com

www.millioncatchallenge.org

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This webinar

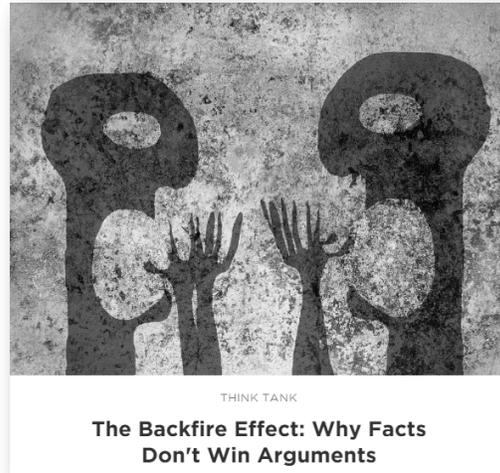


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Limitations of directing the rider

- Relevant facts *do not influence* identity beliefs
- Contradictory information *tends to strengthen* identity beliefs
- However, when beliefs become widely accepted, individuals tend to become more accepting of “corrective information”



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Where I came from



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How I got here



The Cliff Notes Version

- There are a LOT of cats in the United States
- Most owned cats are sterilized, vaccinated, and many are kept indoors
- Most concerns and harm arise from unowned and semi-owned cats (community cats)
- Shelters are the primary agency tasked with managing community cats in the U.S.
- Historically, shelters have had one active tool (intake/removal) to manage community cats
- The main legal alternative to removal has been non-intervention
- Removal to a shelter is not an effective tool for community cat management in all circumstances
- Return to Field (RTF) has emerged as a second active tool for community cat management
- In some circumstances, RTF is more effective than removal to serve the goals of a community cat management program
- Shelters should be able to thoughtfully choose which tool is appropriate for management depending on the specific circumstances

Cat numbers in the U.S.



Education, low cost
spay/neuter, licensing,
laws



Colony cats:
Traditional TNR,
shelter intake



Semi-owned and un-
owned: Most cats, most
concerns, most shelter
intake

75-95 million pet cats (85% sterilized)
30-80 million community cats (~ 2% sterilized)
< 5% are in colonies

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Management tools should be thoughtfully chosen

The impact of free-ranging domestic cats on wildlife
of the United States

Scott R. Loss, Tom Will & Peter P. Marra

[Affiliations](#) | [Contributions](#) | [Corresponding author](#)

Nature Communications 4, Article number: 1396 | doi:10.1038/

Received 06 September 2012 | Accepted 12 December 2012 |

Updated online 12 December 2013

[Corrigendum](#) (December, 2013)

Structured decisions about actions to reduce
wildlife mortality require a quantitative evidence
base...Future **specific management decisions,**
both in the United States and globally, must be
further informed by fine scale research that
allows analysis of population responses to
cats and assessment of the success of
particular management actions.

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Not a unique struggle

J. Range Manage.
52:398–412 September 1999

Invited Synthesis Paper:

Coyote depredation control: An interface between biology and management

We believe there is a **need to address the controversy surrounding coyote depredation management**, to enlighten resource managers and the general public, and to stimulate discussion and research regarding new avenues of approaching the persistent problem of coyote depredation management.

The resilience of coyote populations dictates that the size of the area involved, the intensity and persistence of effort, timing of removal with respect to vulnerability of prey, as well as normal demographic processes of coyotes, must be considered. Effecting removals as close as practical to the anticipated risks, both in time and proximity, is important.

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Ineffective management can cause harm

Nonlethal Techniques for Managing Predation: Primary and Secondary Repellents

John A. Shivik
Wildlife Services, National Wildlife Research Center and Utah
University, Logan UT

Adrian Treves
Center for Applied Biodiversity Science, Conservation Interna

Peggy Callahan
Wildlife Science Center, 5463 West Broadway, Forest Lake, M

“As long as private livestock producers can externalize the costs of predator losses via government-subsidized predator control, they will have **little incentive** for responsible animal husbandry techniques, i.e., reduce stocking levels, clear carcasses and after-births quickly, confine herds at night or during calving/lambing, install fencing...or **adopt numerous other non-lethal preventive methods to avoid depredation** (Shivik et al. 2003).”

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Goals of cat management

- Resolve complaints
- Return lost cats to their owners
- Find new homes for cats that need them
- Protect the welfare of cats
- Reduce harm caused by cats
 - To wildlife
 - To public health
- Reduce the number of free roaming cats overall

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Historical U.S. cat management model

- Ad hoc admission based on community member perception and preference
- Outcomes are adoption (or transfer/rescue for adoption), return to owner, relocation, euthanasia



"the size of the area involved, the intensity and persistence of effort, timing of removal with respect to vulnerability of prey, as well as normal demographic processes"

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Return to field/TNR diversion

- Healthy, free-roaming, unidentified cats
 - Adults and older kittens
 - Regardless of finder's intent
 - Known feeder not required
- Sterilize, vaccinate, ear tip, return to location found
- Operated through shelter (RTF) or diversion to dedicated program (TNR)



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Public preference



Cat owner support for trapping and impounding stray dogs and cats



Non-cat-owner support for trapping and impounding stray dogs and cats



For all respondents, 73% strongly or mostly supported trapping and impounding stray pets and 76% strongly or mostly supported TNR programs for stray animals.

Dabritz, H. A., et al. (2006). "Outdoor fecal deposition by free-roaming cats and attitudes of cat owners and nonowners toward stray pets, wildlife, and water pollution." *J Am Vet Med Assoc* 229(1): 74-81.



Strongly or mostly agree Neutral Disagree



Strongly or mostly agree Neutral Disagree

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Ineffective management can cause harm

Please re-think this whole approach. Stop normalizing it. It is in many instances not humane and an excuse for devoting the actual resources needed to stop the population of friendly cats on the streets in the first place.

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Equally applicable standard



Please re-think this whole approach. Stop normalizing it. It is in many instances not humane and an excuse for devoting the actual resources needed to stop the population of friendly cats on the streets in the first place.

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Harm reduction

- Recognizes that imperfect but effective strategies can have greater benefit than hypothetically preferred but realistically unattainable outcomes
- E.g. clean needle exchange for IV drug users, access to birth control for teens

Harm reduction principles for healthcare settings

[Mary Hawk](#) , [Robert W. S. Coulter](#), [James E. Egan](#), [Stuart Fisk](#), [M. Reuel Friedman](#), [Monique Tula](#) & [Suzanne Kinsky](#)

Harm Reduction Journal 14, Article number: 70 (2017) | [Cite this article](#)

9604 Accesses | 12 Citations | 23 Altmetric | [Metrics](#)

Abstract

Background

Harm reduction refers to **interventions aimed at reducing the negative effects of health behaviors without necessarily extinguishing the problematic health behaviors** completely. The vast majority of the harm reduction literature focuses on the harms of drug use and on specific harm reduction strategies, such as syringe exchange, rather than on the harm reduction philosophy as a whole. Given that a harm reduction approach can address other risk behaviors that often occur alongside drug use and that harm reduction principles have been applied to harms such as sex work, eating disorders, and tobacco use, a natural evolution of the harm reduction philosophy is to extend it to other health risk behaviors and to a broader healthcare audience.

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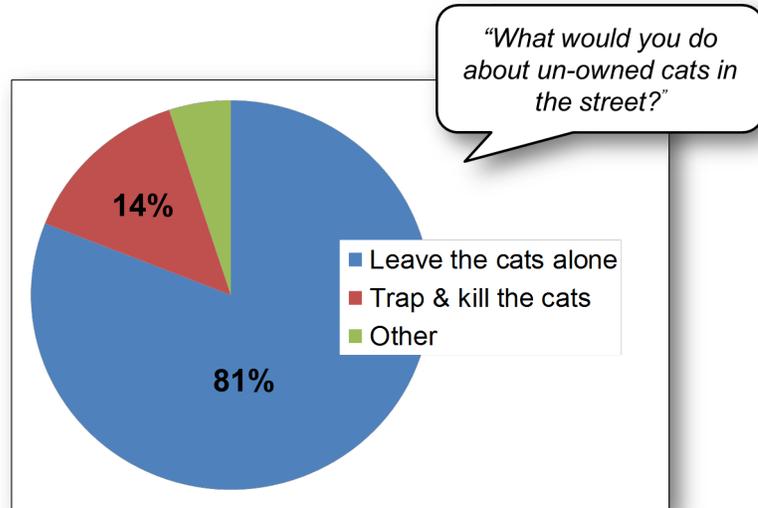
Resolve complaints



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Resolve complaints?



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Harm reduction

- Recognize that caring for cats is a common behavior
- Prevent a few cats from turning into a nuisance/colony by RTF and making TNR easy and accessible
- Use non-lethal programs to open doors to conversation with caretakers about nuisance reduction
- Educate on responsible feeding and management practices



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Effective nuisance mitigation

What will solve this problem?



Raccoons live in all five boroughs of New York City. They can easily adapt to live wherever food and shelter are available. Raccoons living on your property or in your house can cause problems:

- Raccoons can have **rabies** and may bite you or your pets.
- Raccoons can **damage** your home and property.

Protect Yourself and Your Pets from Rabies

All mammals can get rabies, a deadly virus that attacks the brain and nervous system. Infected raccoons can give rabies to you and your pets through bites and scratches.

A rabid raccoon may

- Appear sick or injured
- Convulse or shake uncontrollably
- Stumble or have trouble standing
- Act unusually friendly or aggressive

If you are bitten or scratched by a raccoon, wash the wound with lots of soap and water. See your doctor as soon as possible or visit the emergency room. Call 311 to report a sick raccoon or if a raccoon scratches or bites you or your pet.

If you own dogs or cats, make sure that their rabies vaccinations are up to date, it's the law. All pets 4 months of age or older need a rabies shot and must be re-vaccinated every one to four years, depending on the vaccine used.

Protect Your Home and Property from Damage

Raccoons are not picky eaters; they will even eat your trash. Raccoons will also live almost anywhere, including under rock piles, fireplace chimneys, hollow walls, attics, the underside of overhangs and beams or sewers. Over time, they can damage your property and become a nuisance.

Prevent Raccoons from Entering Your Home

- **Always feed pets indoors** to avoid attracting raccoons and other pests.
- **Keep your garbage and recycling areas clean**, and make sure these containers are tightly sealed.
- **Buy a raccoon-resistant trash container**, or place a weight on the lid of your garbage bin.
- **Seal all openings** to your home, garage and outdoor sheds.
- **Replace** storm screens and fix broken windows.
- **Trim tree branches** that raccoons could use to climb onto your roof.
- **Sprinkle cayenne pepper** around your property as raccoons find it irritating. (Use cayenne pepper with caution; it can be very irritating to pets.)
- **Fence in areas** underneath decks.

Drive Raccoons Out of Your Home:
Raccoons look for safe, quiet areas to set up dens, especially female raccoons with litters. An uncomfortable environment may cause raccoons to leave your property.

- **Never attempt to capture or trap a raccoon.**
- **Use bright or flashing lights** or play loud music in your attic or other areas where raccoons live.
- **You may need to hire a licensed professional Nuisance Wildlife Control Operator.** Visit the New York State Department of Environmental Conservation at dec.ny.gov, and search wildlife control to find a wildlife trapper near you.

Raccoons in New York City: Keeping Them Away From Your Home and Property

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Incentive for effective mitigation

“People **no longer** could use the shelter as the “Easy Button” – a place to drop off cats without trying to find their own solutions to the problem, sometimes of their own making...**The old answer would have been: set traps and animal control will go out and pick up the cats. This option has been eliminated. Now we have a conversation...our job is to help facilitate the public to engage in the desired behavior** which could be **TNR** or helping a neighbor with TNR, **not feeding their pets outside** which could be attracting cats, **making their yard unattractive** to cats in various ways, **having a stray cat scanned** for a microchip, **advertising a found cat on Craigslist**, etc.”

- Tracy Mohr, Chico City Animal Services

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Tools for mitigation

- Provide complainants with resources to reduce nuisance impact
- Follow up on RTF with focused TNR to reduce remaining issues in the environment
- Address serious nuisance concerns/cat hoarding with a multi-faceted approach that includes removal as well as RTF/TNR



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Linking RTF to TNR and follow-up

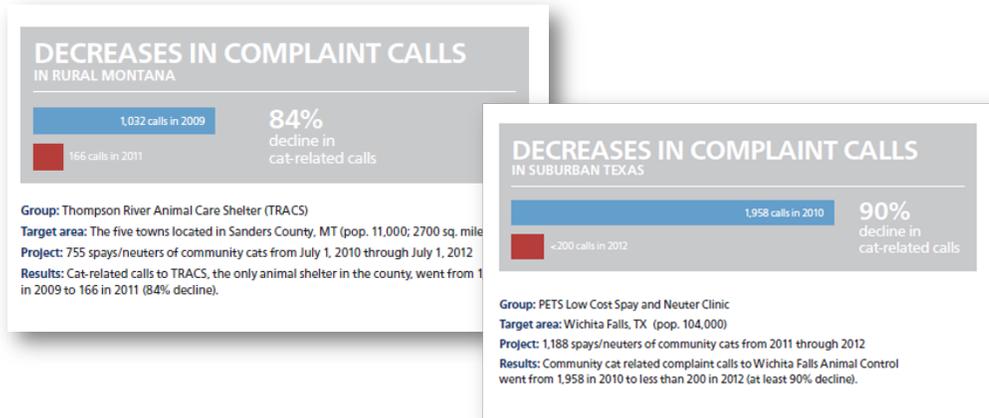
- Often cat brought to shelter is one of several (or many)
- Feeder is not the same as trapper
- Flyers in area of return will alert feeders to TNR options
- Active follow-up on RTF hotspots by partner TNR groups magnifies benefit
- Public, private or partnership to resolve ongoing issues related to either nuisance or welfare



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TNR impact on complaint calls



[ICMA/HSUS Community Cat Management Guide](#), page 31

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Re-unite lost cats with owners



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Reunite cats with owners?

Search and identification methods that owners use to find a lost cat

Linda K. Lord, DVM, PhD; Thomas E. Wittum, PhD; Amy K. Ferketich, PhD; Julie A. Funk, DVM, PhD; Paivi J. Rajala-Schultz, DVM, PhD

Objective—To characterize the process by which owners search for lost cats and identify factors associated with time to recovery.

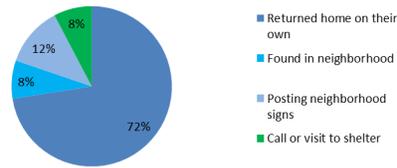
Design—Cross-sectional study

Sample Population—Owners of 138 cats lost in Montgomery County, Ohio, between June 1 and September 30, 2005.

Procedure—A telephone survey was conducted.

Results—73 of the 138 (53%) cats were recovered; median time to recovery was 5 days (range, 0.5 to 81 days). Most cats (48 (36%)) that were recovered returned home on their own or were found in the neighborhood (5 (7%)); most other cats were recovered through posting of neighborhood signs (8 (11%)) or calling or visiting an animal agency (5 (7%)). The highest success rate for any of the search methods that were used was only 12%.

Methods by which lost cats were reunited with owners



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Consistent results

Search Methods Used to Locate Missing Cats and Locations Where Missing Cats Are Found

Liyan Huang¹, Marcia Coradini^{1,*}, Jacque Rand^{1,2}, John Morton³, Kat Albrecht⁴, Brigid Wasson⁴ and Danielle Robertson⁴

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² Australian Pet Welfare Foundation, Kenmore, Queensland 4069, Australia; jacquie@apwf.org.au (J.R.)

³ Jemora Pty Ltd., Geelong, Victoria 3220, Australia; john.morton@optusnet.com.au (J.M.)

⁴ Missing Pet Partnership, Cloverdale, CA 6105, USA; info@katalbrecht.com (K.A.); bwasson@missingpetpartnership.org (B.W.); danielle@lostpetresearch.com (D.R.)

* Correspondence: m.coradini@uq.edu.au; Tel: +61-7-5460-1788

Received: 19 November 2017; Accepted: 20 December 2017; Published: 2 January 2018

“Of the cats that were found alive, the vast majority were found outside (83%). This was followed by the option offered as ‘cat being found inside someone else’s house’ (11%), inside the house where they lived (4%), and inside a public building (2%), therefore less than 2% of found cats were in a shelter or municipal animal facility.”

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Lost versus free roaming cats

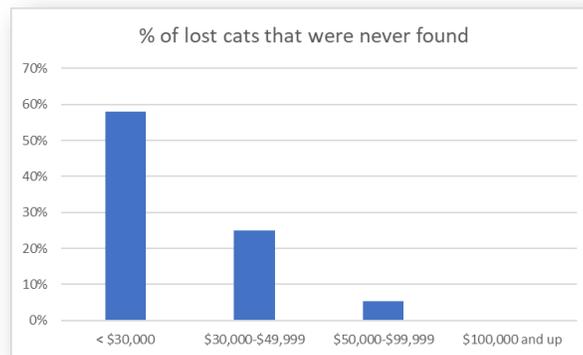
- Most feral cats brought to shelters *aren't pets*
 - Unowned or semi-owned free roaming cats
- Many friendly cats brought to shelters *weren't lost*
 - Indoor/outdoor pet cats going on their neighborhood rounds
- Most lost pet cats *will not be found* at a shelter



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Most at risk



Weiss, E., et al. (2012). "Frequency of Lost Dogs and Cats in the United States and the Methods Used to Locate Them." *Animals(2)*: 301-315.

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A better tool

Search Methods Used to Locate Missing Cats and Locations Where Missing Cats Are Found

Liyan Huang¹, Marcia Coradini^{1,*}, Jacque Rand^{1,2}, John Morton³, Kat All
Brigid Wasson⁴ and Danielle Robertson⁴

¹ Gatton Campus, The University of Queensland, Queensland 4343, Australia

² Australian Pet Welfare Foundation, Kenmore, Queensland 4069, Australia

³ Jemora Pty Ltd., Geelong, Victoria 3220, Australia

⁴ Missing Pet Partnership, Cloverdale, CA 6105, USA

* Author to whom correspondence should be addressed.

Animals **2018**, *8*(1), 5; <https://doi.org/10.3390/ani8010005>

Received: 19 November 2017 / Revised: 10 December 2017 / Accepted: 20 December 2017 / Published: 2 January 2018

The finding that owned cats are often found not far from where they go missing provides evidence to support shelter-neuter and return (SNR) strategies, also known as return to field and cat diversion.”

Huang, L., et al. (2018). "Search Methods Used to Locate Missing Cats and Locations Where Missing Cats Are Found." *Animals (Basel)* **8**(1).

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Return to field home

- *Friendly* free roaming cats in good condition are likely to have someone who cares
- RTF bypasses language, transportation and cost barriers
- Resolves mismatch of timing in when cats are lost and when people look for them
- Educates community members directly about spay/neuter

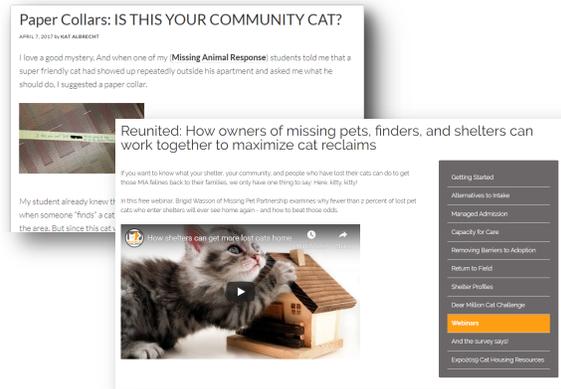


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When is the shelter the right tool for RTO?

- Efforts already made to reunite the cat in the neighborhood of origin
 - Post, scan, social media, talk to neighbors
- Evidence that the cat is lost or abandoned versus indoor/outdoor pet
 - Length of time/consistency of sighting
 - Body condition and health
- In conjunction with robust, cat-specific RTO shelter programs



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Find new homes for cats that need them

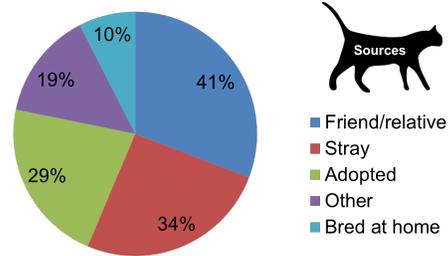


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Find new homes for cats?

- Prioritize adoption pathway for kittens, owner surrendered cats, cruelty/hoarding cases, and targeted intervention
 - Serious nuisance/public health issues
 - Environmentally sensitive areas
- Prioritize working homes for above categories of adult cats that aren't appropriate for adoption

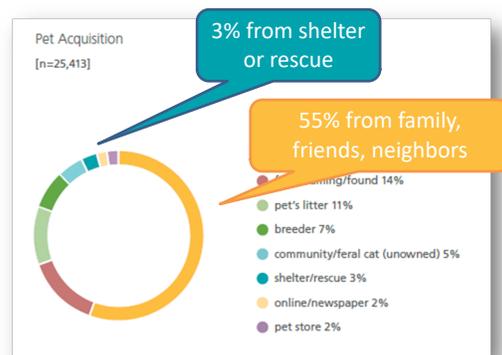


Sources of Pet Acquisition (APPA)

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Close the loop on homes that cats already have

- Most pets in disadvantaged communities adopted from a source other than a shelter
- Return to field for friendly, healthy cats can close the loop on sterilization and vaccination for cats already "adopted" from another source
- Open doors for further education and risk mitigation

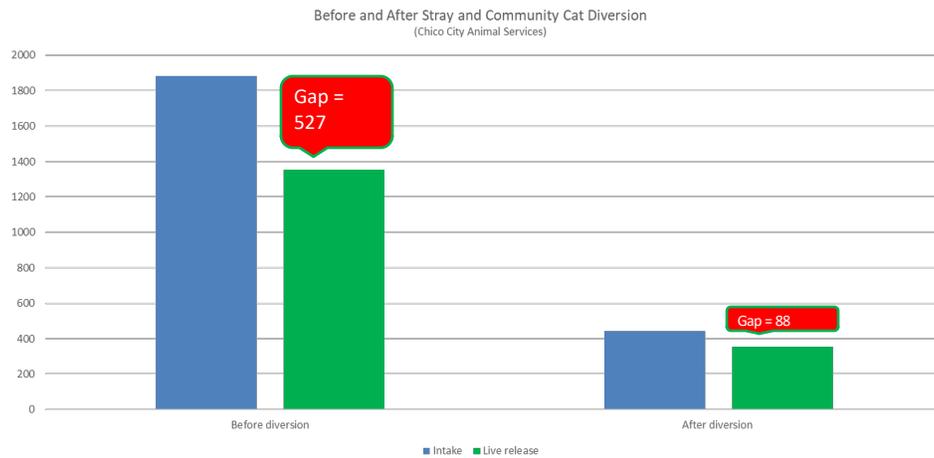


HSUS Pets for Life Report 2014

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Reserve homes for the cats that *need* them



<https://www.animalsheltering.org/magazine/articles/change-better-chico>

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Protect the welfare of cats



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Highly adaptable

Less than 1% of >100,000
cats at TNR clinics
euthanized for humane
reasons

Median survival in a managed
colony 6.8 years

Annual survival of semi-
owned cats up to 90%
(un-owned ~50%)



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Increase fitness through RTF

Body Condition of Feral Cats and the Effect of Neutering

Karen C. Scott, Julie K. Levy, and Shawn P. Gorman

*College of Veterinary Medicine
University of Florida, Gainesville*

Susan M. Newell

*Ocean State Veterinary Specialist
East Greenwich, Rhode Island*

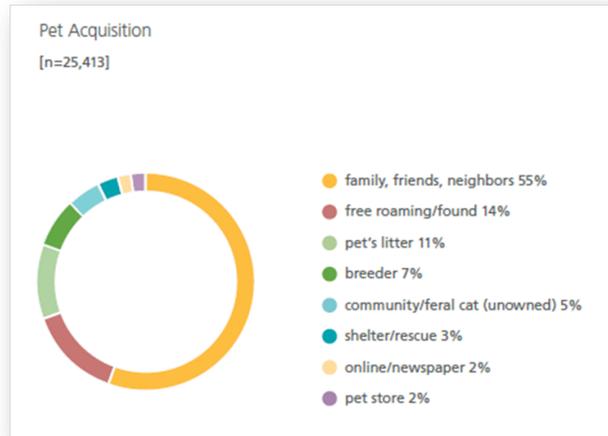
Fourteen cats, reevaluated 1 year after neutering, increased 260% + 90% in falciform fat pad depth, 420% ± 390% in fat pad area, 40% ± 4% in BW, and 1 level in BCS ranking (1 to 9 scale; all differences $p < .001$).

Similar to confined socialized cats, feral cats gained significant weight and body fat after neutering.

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Increase fitness through RTF



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Highest risk

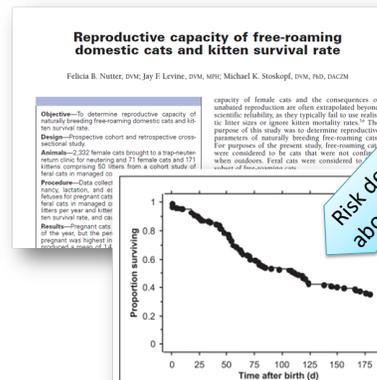


Figure 2—Kaplan-Meier survival curve for 169 kittens born to free-roaming cats. Kittens were observed for 180 days after birth.

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Impact of *removal* on age structure

J. Range Manage.
52:398–412 September 1999

Invited Synthesis Paper:

Coyote depredation control: An interface between biology and management

FREDERICK F. KNOWLTON, ERIC M. GESE

Authors are research wildlife biologists, USDA, National wildlife biologist, USDA, National Wildlife Research Center,

“Unexploited coyote populations typically have older age structures, high adult survival rates, low reproductive rates (especially among yearlings), and low recruitment into the adult population. ”

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Choose your tools

- RTF or TNR instead of removal to reduce kitten births and stabilize age structure
- Return to field with education and mitigation for cats in good body condition at the time of presentation
- Adoption for cats not doing well in the outdoors and for social kittens



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Reduce cat numbers to reduce risk to wildlife, public health and cats



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Requirement for population management

- *At least 50% removal required for eradication*
- ~ 30-80 million un-owned cats in the U.S.
- 1 for every 3-12 people in a community – you can do the math
- *Removal short of eradication has no benefit*

Estimation of effectiveness of three methods of feral cat population control by use of a simulation model

Robert J. McCa

Unless > 57% of cats were captured and neutered annually by TNR or removed by lethal control, there was minimal effect on population size.

Use of matrix population models to estimate the efficacy of euthanasia versus trap-neuter-return for management of free-roaming cats

Mark C. Ande

The model predicted effective cat population control by use of **annual euthanasia of > 50% of the population** or by annual neutering of > 75 of the fertile population.

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Removal short of eradication

Wildlife Damage Management Conferences --
Proceedings

Wildlife Damage Management, Internet Center for

1-1-2005

Demographic and Spatial Responses of Coyotes to Changes in Food and Exploitation

Eric Gese

USDA, APHIS, Wildlife Services, National Wildlife Research Center, Logan, UT, USA

Removals brought about a drastic reduction in pack size and a corresponding decrease in density. However, both **pack size and density rebounded to pre-removal levels within 8 months post-removal**. ..Accounting for both changes in prey abundance and coyote density, litter size was significantly related to total prey abundance/coyote. **With increasing prey and reduced coyote density, mean litter size doubled** in the removal area compared to pre-removal levels.

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Removal short of eradication

Effects of low-level culling of feral cats in open populations: a case study from the forests of southern Tasmania

Billie T. Lazenby^{A,B,D}, Nicholas J. Mooney^C and Christopher R. Dickman^A

^ASchool of Biological Sciences, A08, University of Tasmania, Hobart, Tas. 7000, Australia.

^BDepartment of Primary Industries, Parks, Water and Fisheries, Hobart, Tas. 7000, Australia.

^CPO Box 120, Richmond, Tas. 7025, Australia.

^DCorresponding author. Email: Billie.Lazenby@utas.edu.au

“Contrary to expectation, the relative abundance and activity of feral cats increased in the cull-sites, even though the numbers of cats captured per unit effort during the culling period declined. **Increases in minimum numbers of cats known to be alive ranged from 75% to 211% during the culling period, compared with pre- and post-cull estimates.**”

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WORSE THAN NOTHING

“This study provides evidence that *ad hoc* culling of feral cats may be not only ineffective, but **has the potential to increase the impact of feral cats in open populations.**”



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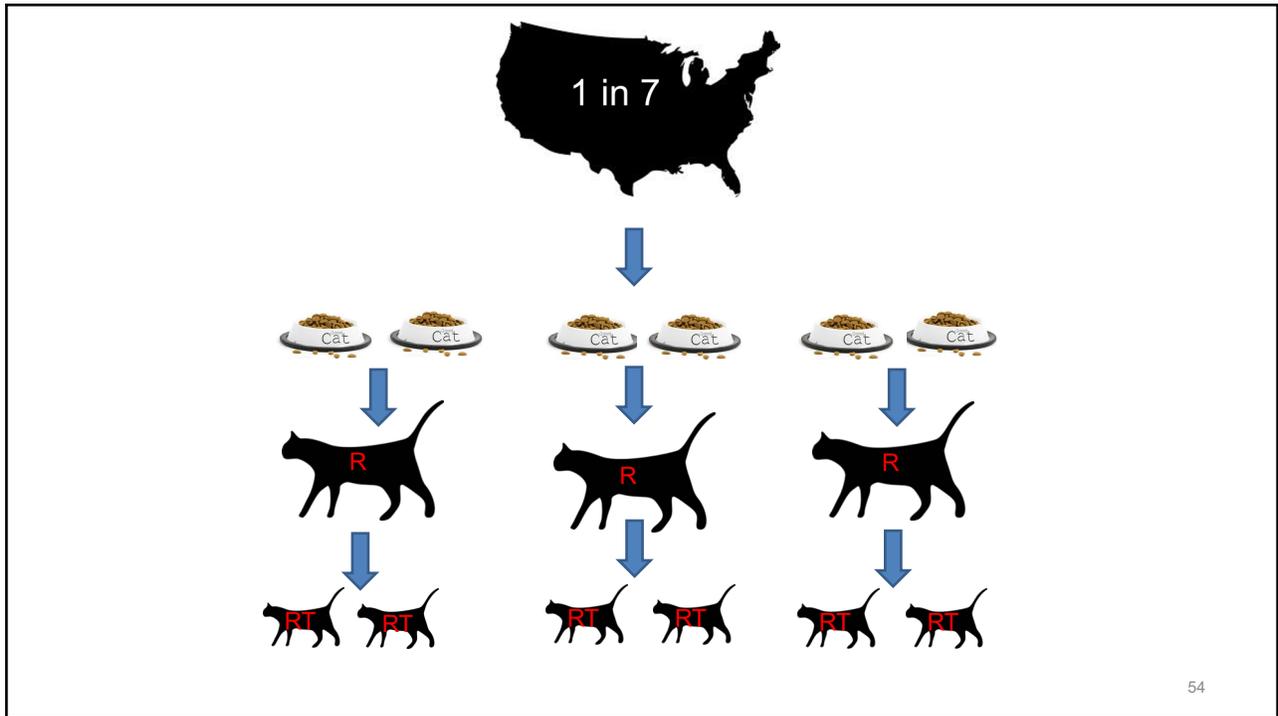
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So what can we do instead?



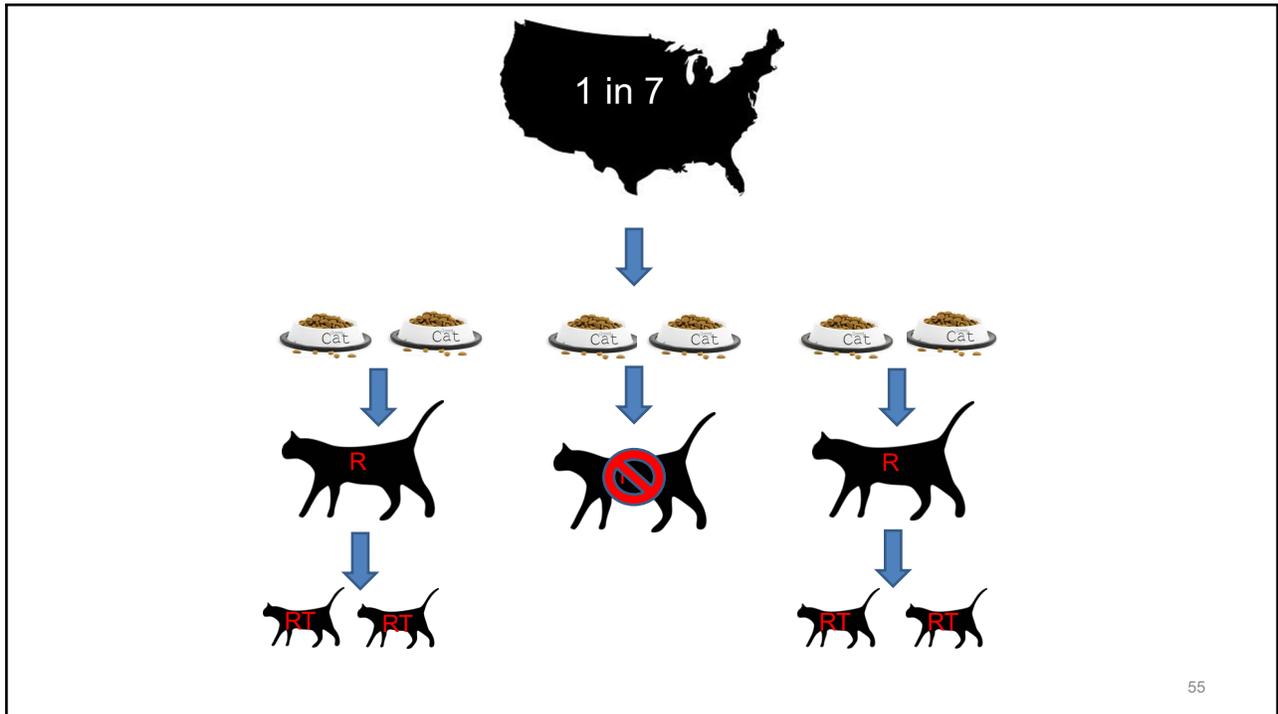
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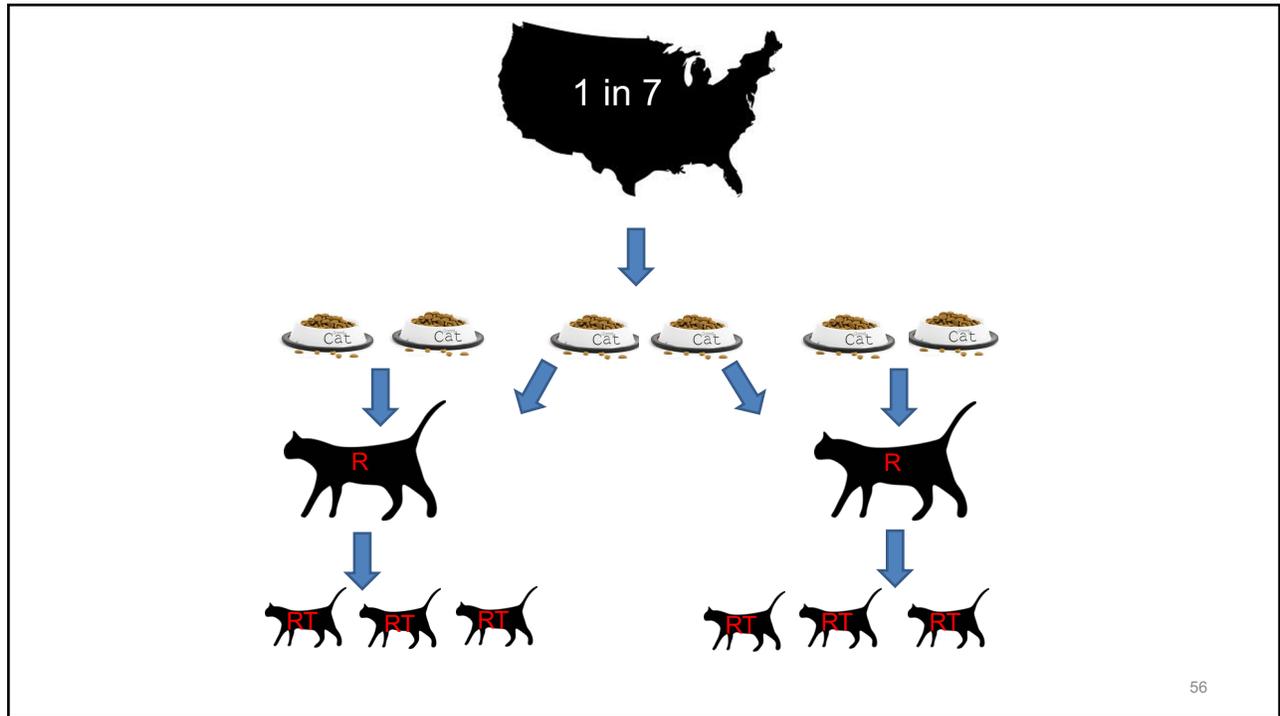
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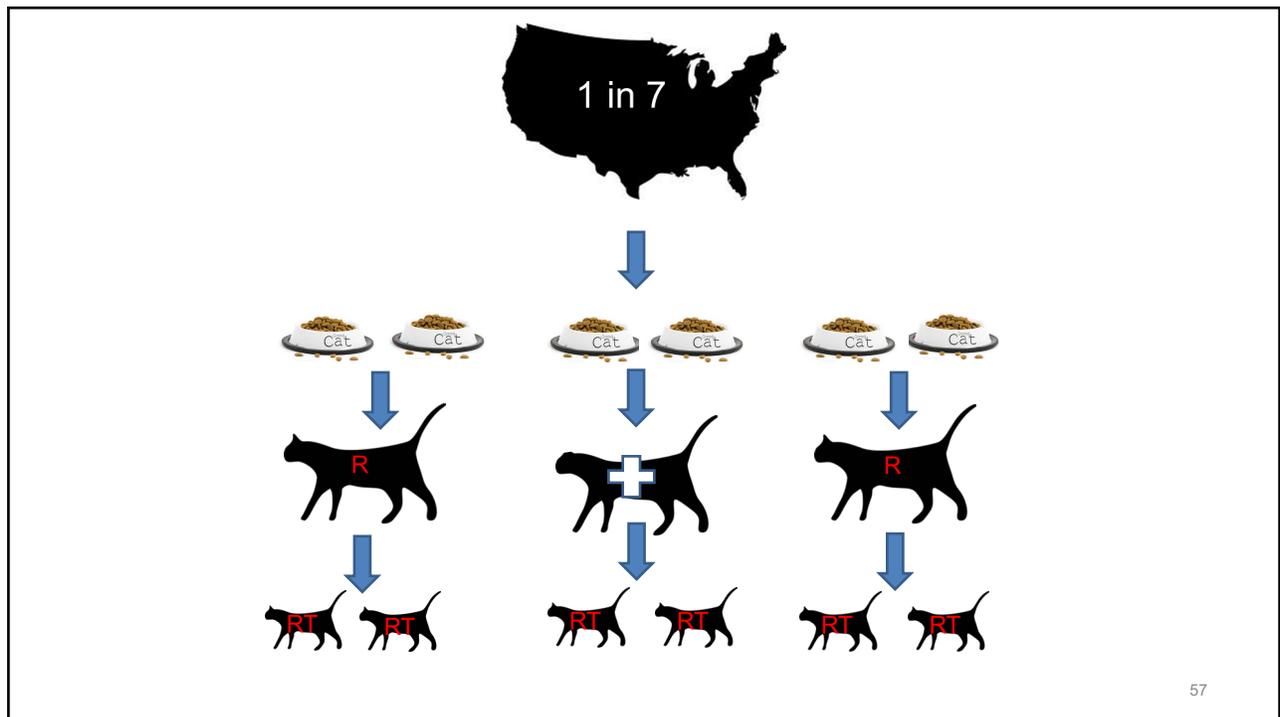


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**Study of the effect on shelter cat intakes
and euthanasia from a shelter neuter
return project of 10,080 cats from March
2010 to June 2014**

Karen L. Johnson¹ and Jon Cicirelli²

¹ National Pet Alliance, San Jose, CA, United States

² San Jose Animal Care and Services, San Jose, CA, United States

- Euthanasia **down 75%**
- Euthanasia due to URI **down 99%**
- Cats picked up dead **down 20%**
- Intake (cat and kitten) **down 29%**

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Animals (Basel). 2018 Apr; 8(4): 55.

Published online 2018 Apr 13. doi: [10.3390/ani8040055](https://doi.org/10.3390/ani8040055)

PMCID: PMC5946139

PMID: [29652808](https://pubmed.ncbi.nlm.nih.gov/29652808/)

The Impact of an Integrated Program of Return-to-Field and Targeted Trap-Neuter-Return on Feline Intake and Euthanasia at a Municipal Animal Shelter

[Daniel D. Spehar](#)¹ and [Peter J. Wolf](#)^{2,*}

[Author information](#) • [Article notes](#) • [Copyright and License information](#) [Disclaimer](#)

- 11,749 cats sterilized and returned over 3-year period
- Euthanasia **down 84%**
- Calls for dead cat pickup **down 24%**
- Intake **down 38%**

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Managed is *better* than unmanaged

EcoHealth

September 2013, Volume 10, Issue 3, pp 277–289 | [Cite as](#)

Toxoplasma gondii, Source to Sea: Higher Contribution of Domestic Felids to Terrestrial Parasite Loading Despite Lower Infection Prevalence

Authors

Elizabeth VanWormer, Patricia A. C.

Infection prevalence differed among sympatric felids, with a significantly lower prevalence for managed feral cats (17%) than mountain lions, bobcats, or unmanaged feral cats subsisting on wild prey (73–81%).

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Lowering risk for the most vulnerable

Front Vet Sci. 2019; 6: 238.

Published online 2019 Jul 26. doi: 10.3389/fvets.2019.00238

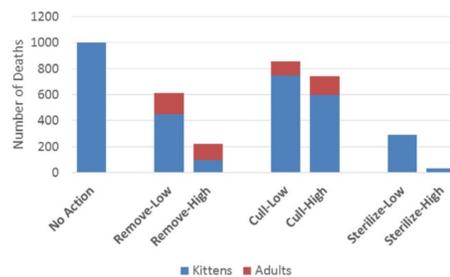
PMCID: PMC6676151

A Long-Term Lens: Cumulative Impacts of Free-Roaming Cat Management Strategy and Intensity on Preventable Cat Mortalities

John D. Boone,^{1*} Philip S. Miller,² Joyce R. Briggs,³ Valerie A. W. Benka,³ Julie K. Levy,⁶ and Stephen Zawistowski⁷

* Author information • Article notes • Copyright and License information

Figure 1



Cumulative number of preventable deaths (kittens that do not survive beyond 6 months of age plus all adults euthanized in "cull" and "remove" scenarios) over a 10-year period for all management scenarios. Parameters of each management scenario are defined in the Methods section.

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The right tool for the job

- RTF for most healthy unowned cats brought to the shelter
 - Healthy feral cats to stabilize populations in the community and limit euthanasia at the shelter
 - Healthy friendly stray/free roaming cats to maximize return to owner and spayed/neutered/vaccinated cats in homes
 - As an avenue to open doors with the majority of community members who support non-lethal control for education and harm reduction
- Traditional shelter pathway for owned cats¹ and:
 - Unhealthy stray/free roaming cats (sick/injured/poor body condition)
 - Cruelty, abuse and neglect cases
 - Interventions for significant nuisance situations/public health or wildlife risk
 - Social kittens on a pathway to adoption
 - As an avenue to open doors with the majority of community members who look to the shelter for stray dog and cat solutions

¹When pet safety net/home to home options are not appropriate

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The bottom line

- **Providing public and private partners with the full range of options for response to unowned cats allows for more effective interventions** – whether that is sterilization and return of healthy free roaming cats, responsible feeding and colony management, or removal for adoption, relocation or as a last resort, euthanasia. **No intervention realistically available is sufficient to completely eliminate cats** from U.S. communities, but a thoughtful approach tailored to the needs of the situation will permit solutions that balance the needs of wildlife, public health, pets and community members to the greatest possible extent.

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Yes, but...

Speech bubbles contain the following text:

- Sounds great but we don't have the funds - what can we do?
- How can we best control feline retroviruses (FeLV, FIV) through TNR?
- How long should we hold cats before return to field?
- We can't help but worry. Are you sure they'll be ok?
- Do we really have to have people bring them in to the shelter? What about just sending cats to TNR?
- What about rabies or other public health concerns?
- What about cat abandonment, licensing or leash laws?
- What if people really don't want the cats back?
- Should we still RTF friendlies when we know we could find them a home?
- Won't it be too cold here in the winter for the cats?

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MORE questions?

www.sheltermedicine.com sheltermedicine@ucdavis.edu www.millioncatchallenge.org

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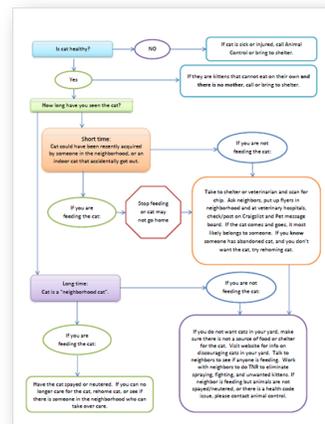
What about a friendly, healthy, altered cat without identification that is brought in by a person who saw it in their neighborhood, put it in a crate and brought it to a shelter? No "trap" involved, and no risk of euthanasia – we have plenty of adopters these days.



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What to do about friendly cats?

- Develop pre-intake screening and intake process that helps identify truly abandoned from indoor/outdoor pet or community cats
- Social behavior increases probability that cat is owned/semi-owned
- Kittens: err on side of adoption if adoption is not a limiting factor at shelter
- Adult cats: err on side of return if no exigent risk



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Direct education

Why should I neuter my cat?
Getting your cat done is good for them... and you! Why? Read on...

- Your cat will fight less, meaning fewer injuries and therefore lower vet bills.
- They're less likely to get diseases through mating and the risk of cancer is reduced.
- Your neutered male is less likely to roam, so there's less chance he'll be hit by a car.
- Got a female cat? No more being woken up by her wailing when she's in heat!
- Kittens are very cute but hard work. Their care takes time, effort and money!
- Neutered males are less likely to spray smelly urine in your house and garden.

Did you know?

- Cats can breed from four months of age.
- Cats will mate with their brothers, sisters and parents.
- One unneutered female can be responsible for 20,000 descendants in just five years.
- Cats don't need just one litter' before being spayed.

Want to know more?
Neuter your cat at four months of age or younger.
Visit www.cats.org.uk/neutering or speak to your vet for advice.
Call our Neutering helpline on 03000 12 12 12 to find out if you're eligible for a voucher. It's kinder to neuter.



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Free roaming ≠ un-loved



Arthur Burrell

“Burrell had eight cats at home. And he would wander the streets and alleyways, sometimes after midnight, looking for others to help. He gave them names like Smoke-a-Dope, Ooka Nooka, Sparkle Treadwell, Bubbles, False Face, Short Body, Squirrel and Weasel. In a spiral-bound notebook, he meticulously documented each cat’s history and medical issues.”

<http://www.animalsheltering.org/resources/magazine/mar-apr-2015/were-thankful-for-arthur.html>

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Survivors

Table 2. Feral cat estimates in Canada from media reports, in relation to 2006 human population, latitude, and January temperature.

Location	Feral Cat Estimates (# of estimates) ¹	Midpoint (approx.)	Human Pop'n (1000s) 2006 Census ²	Feral Cats / 1000 Persons	Latitude (N) ³	January Avg Temp (C) ⁴
Vancouver	Tens of thousands (1)	25,000	2117	12	49.2	3.3
Toronto	20,000 to 500,000 (4)	200,000	2503	80	43.7	-5.3
Windsor	25,000 to 50,000 (2)	35,000	383	91	42.3	-4.5
Regina	25,000 (1)	25,000	221	113	50.4	-16.2
Montreal	100s of thousands (1)	250,000	1854	135	45.5	-10.3
Winnipeg	50,000 to 200,000 (4)	100,000	636	157	49.9	-17.8
Province of Quebec	1.6 Million (1)	1,600,000	7544	212		
Halifax	110,000 (1)	110,000	373	295	49.8	-5.2

¹Sources: Stray Cats a Big Problem 2008, Horan 2009, Lakey 2009, Lowe 2009, Pearson 2009, Winnipeg's Stray-Cat Population.. 2009, Tindal 2010, Botelho 2011, Cat Populations Increase... 2011, Omsby and Wilkes 2011, Skerritt 2011, Sullivan 2011, THS Feral Cat Clinics Coming in May 2011, Winnipeg's Feral Cat Population Grows 2011; P. Curry, S. Eberl, and P. Vogt, et al.

²Source: Statistics Canada 2007

³Source: Environment Canada 2011; averages used if more than one weather station

"there is no apparent relationship between estimates of feral cats and latitude or January temperature in southern Canada (Table 2), and feral cat numbers may be significant in parts of Alaska"

Blancher, P. (2013). "Estimated Number of Birds Killed by House Cats (*Felis catus*) in Canada." *Avian Conservation and Ecology* **8**(2).

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How can we protect cats from the cold?

- Open lines of communication to advise on food and shelter
- Access to sterilization most of the year
- Cats that are trapped and not freezing have something worked out
- Special precautions when unusually cold *for your area*

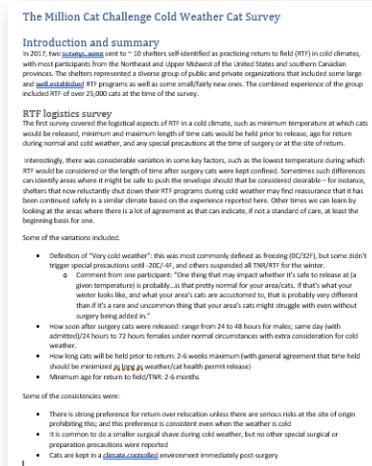


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Cold weather RTF

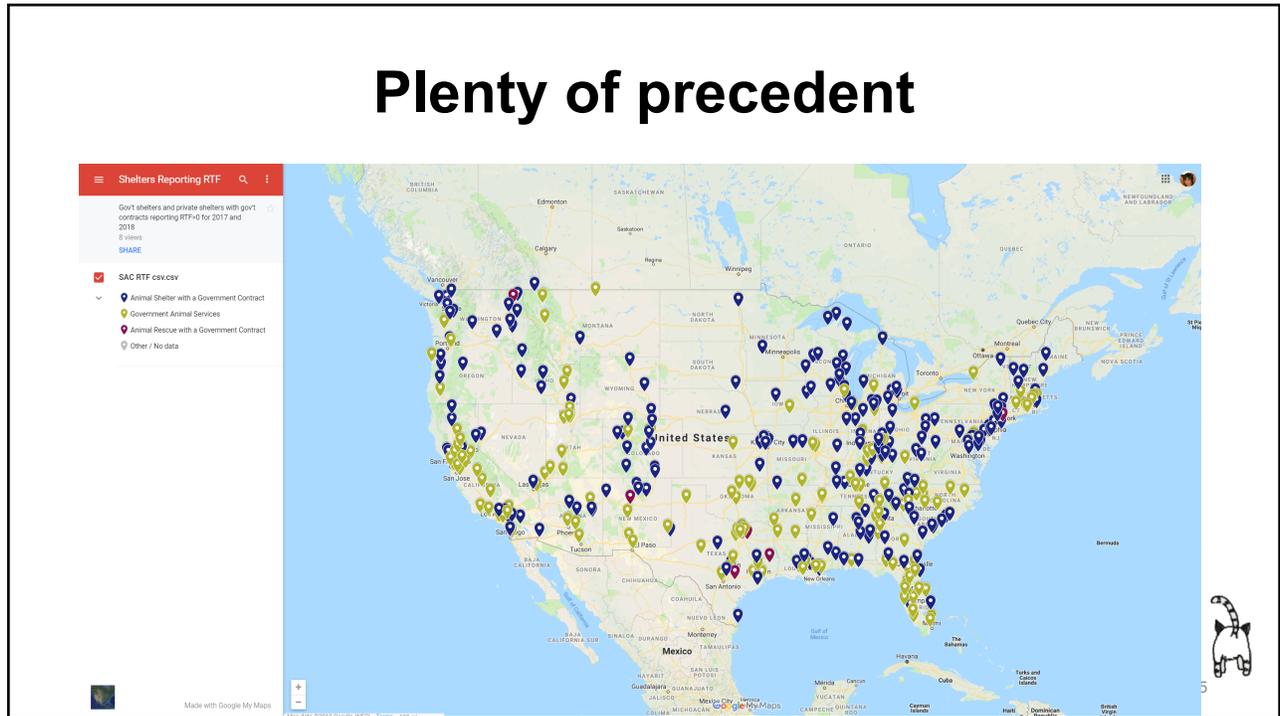
- Discourage trapping when weather is unusually cold for your region
- Keep surgical shave small
- Recover cats in climate-controlled environment immediately post surgery
- Return promptly unless unusually severe weather (24-48 hours male, 24-72 hours female)
- Ok to keep up to 2-6 weeks if you absolutely must



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Plenty of precedent



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We do return to field and have saved close to 1,000 cat lives over the past three years. The shelter we work with requires that the cats are combo tested. Would you recommend continuing this practice?



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	Model 1 No sterilization No testing	Model 2 Sterilize 1,000 Remove FeLV+	Model 3 Sterilize 2,000 No testing
Percent FeLV+	4%	4%	4%
Adults sterilized	0	1000	2000
Adults left intact	2000	1000	0
FeLV+ euthanized	0	40	0
Adults left FeLV+	80	40	80
Kittens born	6000	2880	0
FeLV+ kittens (75%)	180	86	0
Total FeLV+ cats	260	126	80

Mass sterilization controls both kitten births and spread of FeLV/FIV



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If rabies vaccines are only licensed for one year, how can we allay our Health Department's concern about return to field?

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Rabies protection

[Cornell Vet](#), 1981 Jul;71(3):311-25.

Experimental rabies in cats: immune response and persistence of immunity.

[Soulebot JP](#), [Brun A](#), [Chappuis G](#), [Guillemin F](#), [Petermann HG](#), [Precausta P](#), [Terre J](#).

Abstract

Experimental rabies was studied in cats under defined conditions. A correlation between the virus dosage and the incubation period was established and results were compared with those published previously by others. The susceptibility of cats to rabies virus appears to be paradoxical. The persistence of the immunity induced by an inactivated rabies vaccine prepared from cell culture-propagated virus used in combination with feline panleukopenia vaccine, with or without adjuvant, was studied through severe virus challenge. Complete protection was observed after more than 3 years following a single vaccination. A proposed vaccination schedule is discussed.

PMID: 7261592

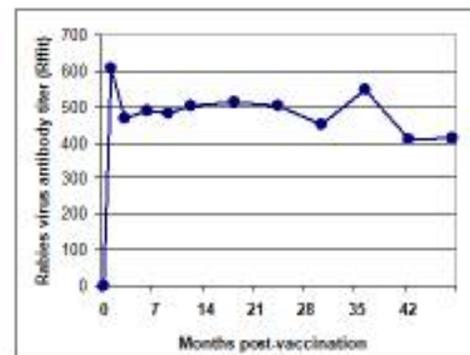
[Indexed for MEDLINE] [Free full text](#)

“Complete protection was observed after more than 3 years following a single vaccination.”

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Rabies protection

- Intervet rabies USDA licensing trial
- 25 12-week-old kittens received single vaccine
- Titers maintained and resisted challenge after 4 years
- 14/15 control kittens developed rabies after challenge



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Rabies protection

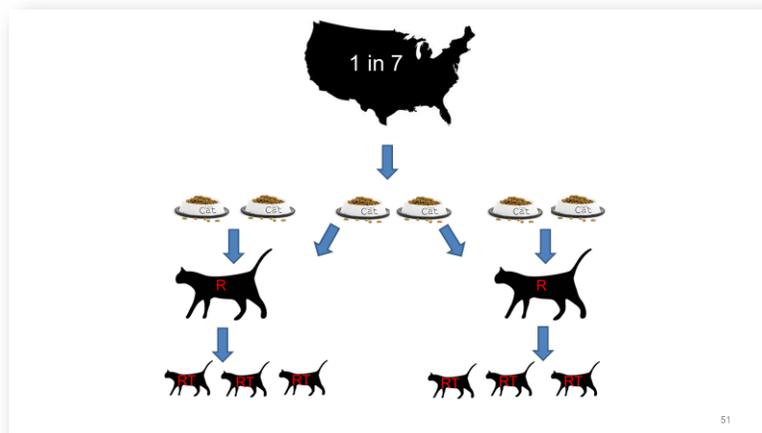
- Use 3 year labeled vaccine for all cats
- Offer free boosters
- Invest in community immunity



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(Also remember removal does not eliminate risk)

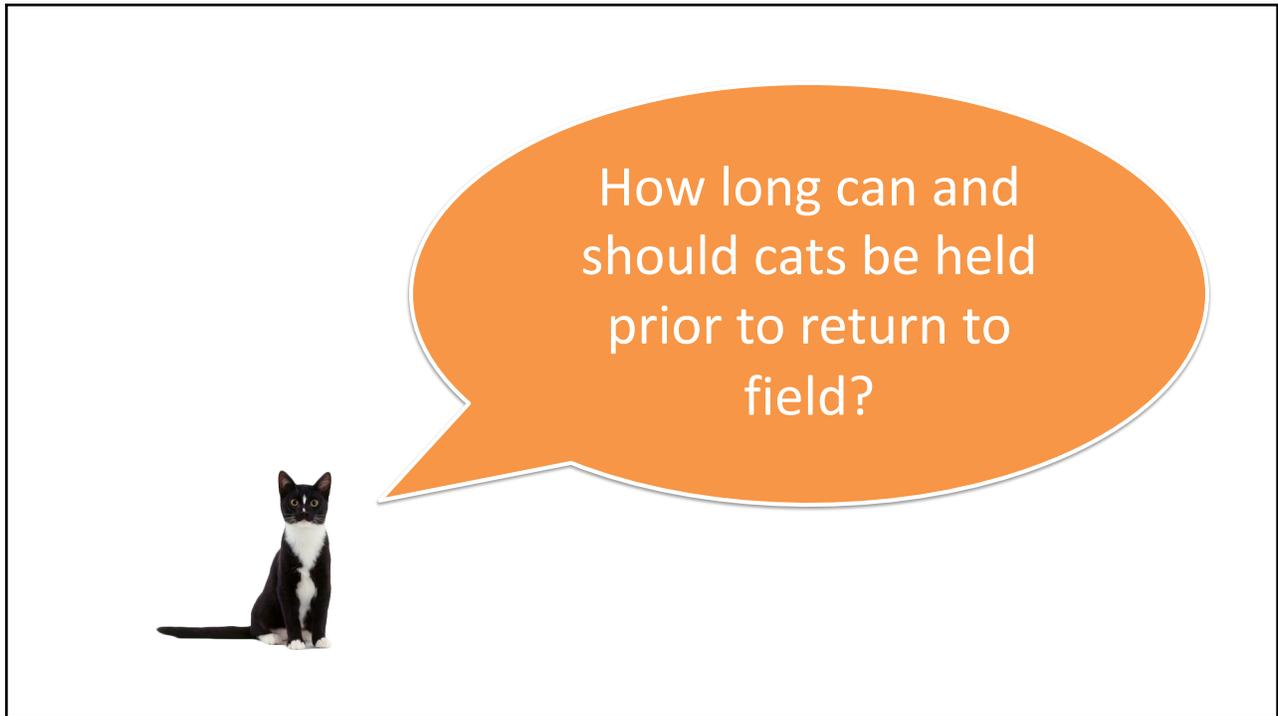


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Holding time for RTF

- Ideally, admit day 1, surgery day 2, release day 3
- Longer holds if extra recovery time required, inclement weather
- Balance recovery time with stress of confinement
- If you **must**, release after 2-6 weeks confinement has been documented

Community cat program amendment gets Fort Wayne council approval

By Ellie Bogue of The News-Sentinel
Wednesday, June 18, 2014 - 8:28 am

Tuesday night the Fort Wayne City Council passed the proposed amendments in the Animal Care and Control Ordinance, which means should the changes be approved by Mayor Tom Henry, Fort Wayne Animal Care and Control, HOPE for Animals and the Allen County SPCA will work in a coalition to sterilize feral cats and return them to the streets.



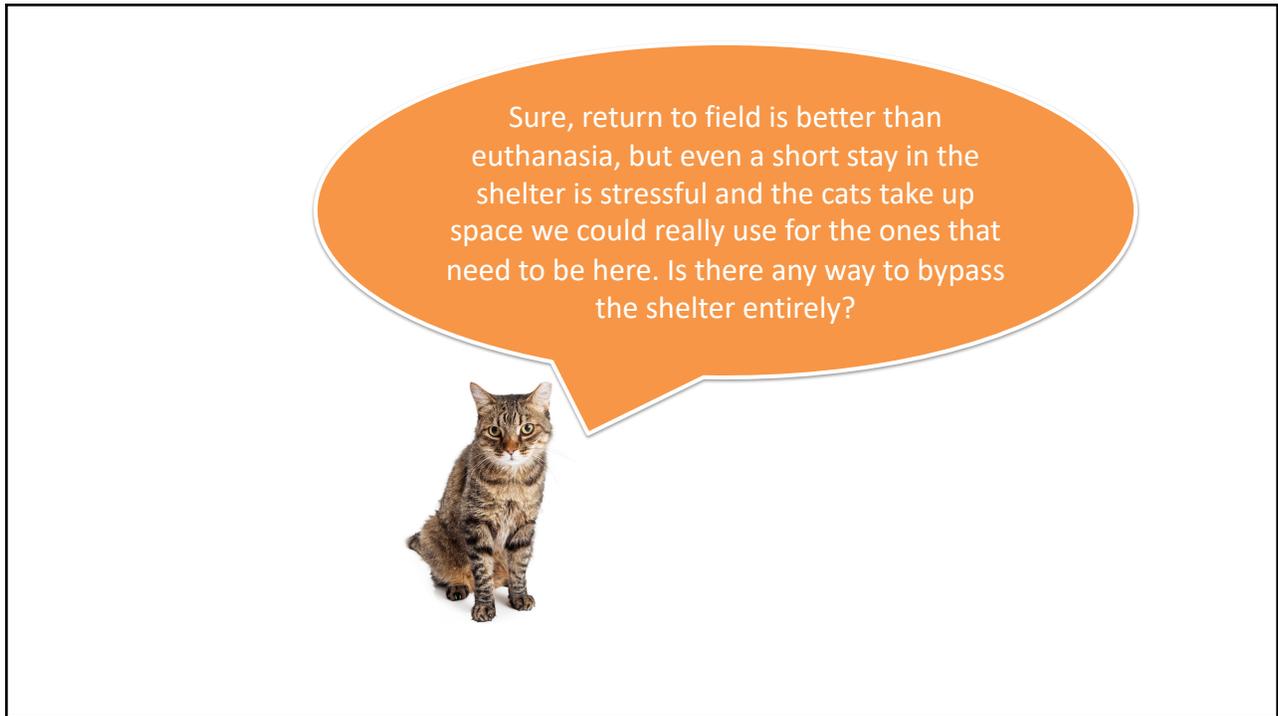
Processing as a community cat shall be exempt from the 3 business day impoundment period.

...or captured by Animal Care and Control officers the cats the animal. After that they are generally euthanized, or adoption.



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Diversion to TNR

- Encourage diversion to TNR program for healthy free roaming cats
- Minimizes time cats spend in confinement
- Finder typically returns to collect cat
- Bypasses legal/policy constraints and holding periods
- Reserves shelter space for sick, injured, neglected and owner surrendered cats

What is a Community Cat Diversion Program?

Community Cat Diversion programs promote public health, make sense for shelters and should not be returned to shelters. They are unsocialized to humans, particularly in home environments, and owners are often being challenged.

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<https://www.young-williams.org/spay-neuter-solutions/community-cat-program/community-cat-diversion-faq/#question-community-cat-program>



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Double check messaging

- Consider what's on your website, front door, front desk
- Train frontline staff to deliver message with conviction
- Make TNR at least as easy and cheap as shelter admission
- Always allow exceptions for high risk/high nuisance situations



Community/Feral Cats

Our Community Cat Program helps manage and care for feral and free roaming cats.

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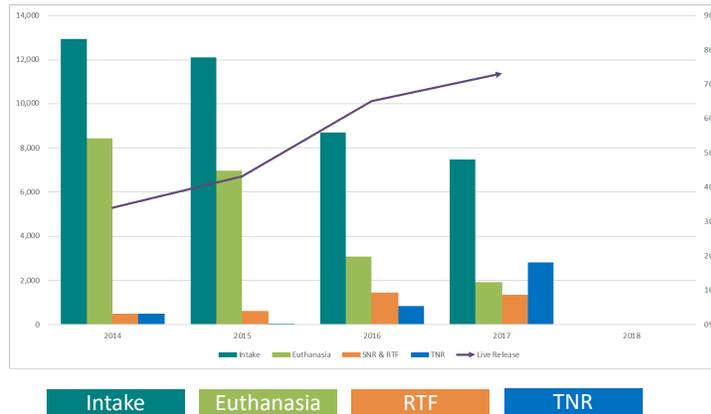
Shaping the path...

"Local governments...changed their local ordinances to eliminate leash and confinement laws for cats and to update language to support community cat programs. This change caused a major shift in how animal control responds to calls for cat situation. They will no longer pick up healthy stray cats and patrons are instructed to put them back or bring them to the shelter themselves (they are also told about the community cat program and that the cat will likely be returned). This has caused a huge reduction in cat intakes at our shelter which has helped contribute to our substantial reduction in cat euthanasia." (Carly Scholten, The Animal Foundation, Las Vegas)



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...with huge results



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How do you handle the situations when people bring cats to the shelter and are emphatic that they don't want the cats back?



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Remember the racoon

- Identify and solve the actual problem
 - Educate about deterrents
 - Offer help with solutions
 - Give it time
- Not appropriate for every situation
 - Save barn and working cat homes for those that really need it

What's Included?
The cat deterrent kit will include one of the motion-activated deterrents. In making use of these products, please ensure that the directions on the Motion Activated Deterrents.

Motion Activated Deterrents:
About 1 Year Guard Ultrasonic motion activated device that, when activated, emits a high-pitched sound that is annoying to cats. Place the device near entry points to your garden or house.

Ultrasonic Deterrents:
About 1 Year Guard Ultrasonic motion activated device that, when activated, emits a high-pitched sound that is annoying to cats, or some predator sounds which are audible only to cats.

Sound Deterrents:
Get Off My Garden! This product is made up of suspended water crystals that slowly release a strong perfumed odour which is intended to confuse a cat's sense of smell. Use the product sparingly and apply to the edges of the area where the cats are known to frequent.

Other Alternatives:
Although the City can only offer a few items in each kit, there are many alternatives on the market that may help to deter cats and other nuisance pests from entering into private property. The City encourages citizens to take the time to research the methods that may work for them.

Planting Alternatives:
Using large or rough surfaced rocks to cover exposed ground or placing rocks into plant pots may prevent cats from digging. Prior to planting in the garden or flowerbed, lay a fabric on the ground and place inside the openings. Use upright chopsticks to surround plants in pots or bases so the cats cannot jump into them. Use mesh to your garden or flowerbed. Cats tend not to like rough textures on their paws, so making the area uncomfortable for them will help to keep them away.

Planting Alternatives:
There are plants that are natural deterrents for cats as they can emit odours that cats dislike.

- Coleus Canina, also known as the Scarecrow Cat plant
- Helleborus Laniatus, also known as the Curry leaf plant
- Lemon Balm plant
- Rosemary
- Lavender

Planting these plants along the borders of a garden or flowerbed may stop cats from entering the area and causing damage. Property owners may also choose to place prickly bushes to keep cats out of flowerbeds and gardens.

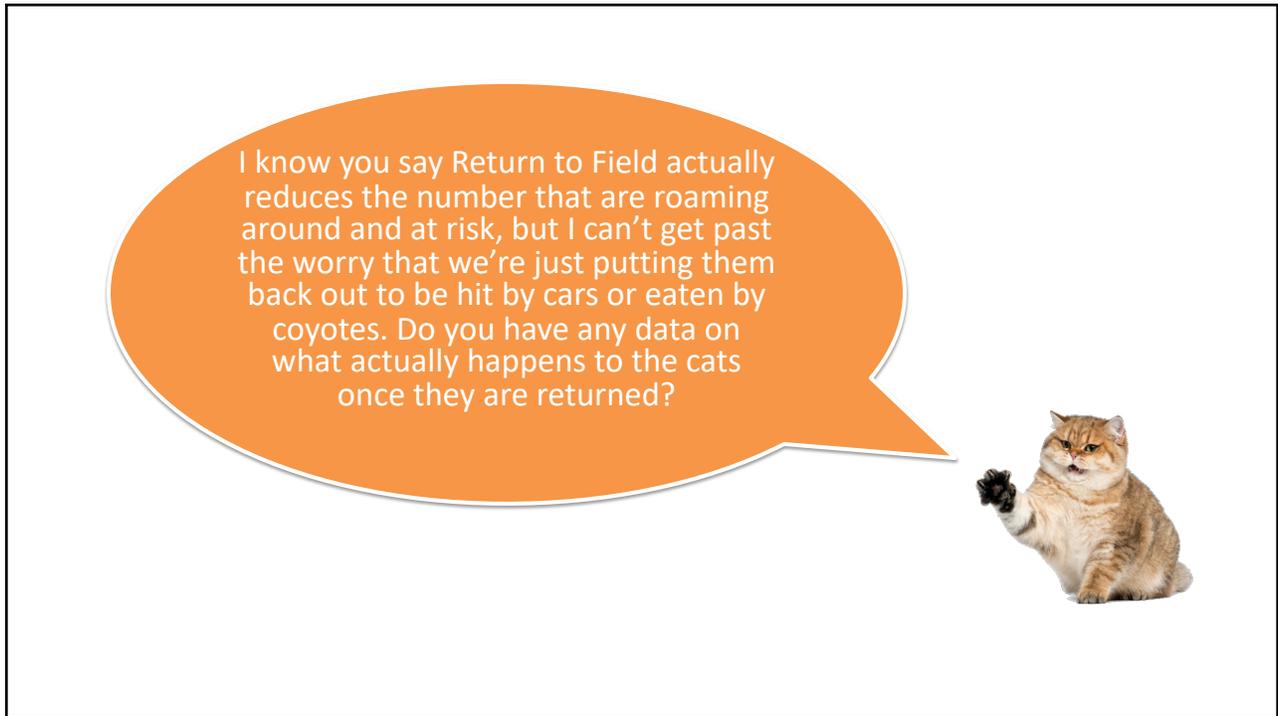
Property owners may need to use multiple items and strategies in various areas to determine what will be most effective for their property.

The City of Edmonton does not warrant the fitness or effectiveness of any of these products or strategies for the purpose of deterring cats. If you have any questions about any of the products found in the Cat Deterrent Kit, please visit https://www.edmonton.ca/residential_neighborhoods/PDF/Cat_Deterrents.pdf

Communicate with confidence and calm

During the first several months of the program, animal control officers and intake desk staff told people dropping off nuisance cats that the cats would be sterilized and returned. This resulted in many heated discussions and complaints from citizens. So, JACPS decided to take cats in and gather the needed information without getting into the specifics about what would happen next. This policy has resulted in far fewer complaints and less stress for the staff involved.





I know you say Return to Field actually reduces the number that are roaming around and at risk, but I can't get past the worry that we're just putting them back out to be hit by cars or eaten by coyotes. Do you have any data on what actually happens to the cats once they are returned?



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Will they be ok?

Study of the effect on shelter cat intakes and euthanasia from a shelter neuter return project of 10,080 cats from March 2010 to June 2014

Karen L. Johnson¹ and Jon Cicciocioppo²

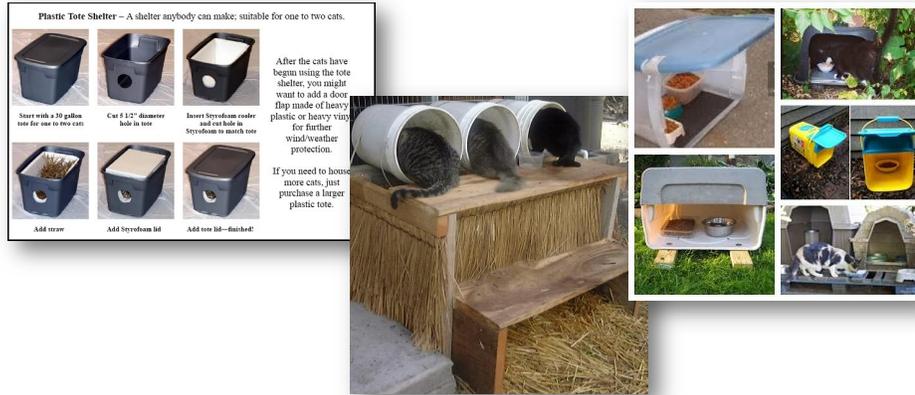
- The shelter received again 185 (1.8%) dead on arrival, of the 10,080 SNR cats, identified by microchip, who had previously been through the SNR program.
- The number of dead cats picked up on the street declined 20% from 1,629 in CY 2009 to 1,308 in FY 2014

¹ National Pet Alliance, San Jose, CA, United States
² San Jose Animal Care and Services, San Jose, CA, United States

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Open doors for conversations about risk mitigation



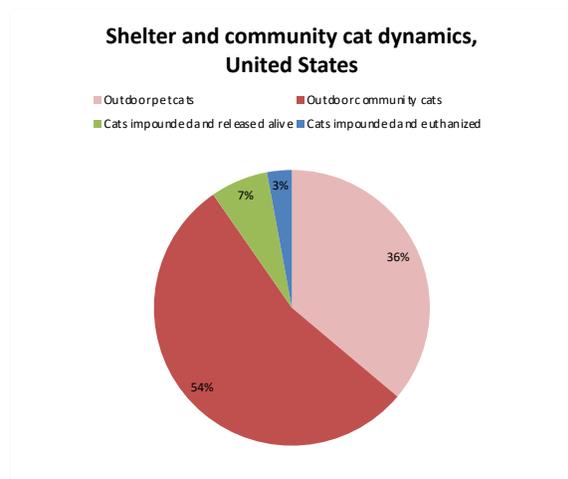
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Putting things into perspective

- Total cats out and about = 50-100 million
- Cats admitted to shelters = ~ 3 million
- ~ 9,000/day = < .02% or < 1 in 5000
- Reduce risk by focusing on cats in **the community**



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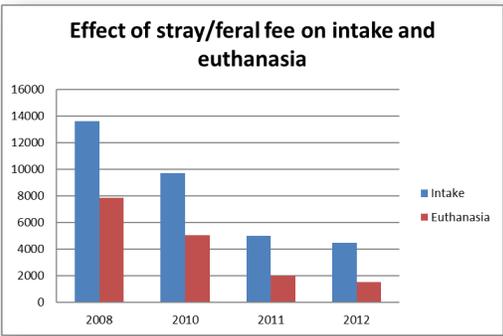
Ok, we're sold. But we don't have the funds for this and we've struck out on grant opportunities. Do you have other ideas for how we can fund this sustainably?



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Paying for return to field

- Evaluate your contracts – should cover cost of live outcome
- Consider what services are currently free that could have fee added or be dis-continued to reallocate resources/reduce intake
- Be efficient – short LOS and focus on key services only
- Work into surgery schedule before kitten season hits



Year	Intake	Euthanasia
2008	13500	8000
2010	9500	5000
2011	5000	2000
2012	4500	1500

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Payoff over time

Our cost to care for a cat is about \$200, and our cost to s/n is \$67. We also take in 3,000 fewer cats per year since the program began. **We never added extra money for this, we just shifted costs by moving the qualifying cats through the shelter and back out as fast as possible.** One of the more **compelling arguments I've seen for governments is future cost control.** If you don't invest now, costs will continue to rise at a greater rate in the future. If you do invest now, you can reduce cat intake and costs over time...and the bonus is, they won't have to do it using lethal control. win win!

- Jon Cicirelli, San Jose City Animal Services



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Is RTF against the law?

We'd love to do return to field, but our local ordinance prohibits abandonment. Have you heard of any ways to work around that?



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RTF and the law

- Legal definition of ownership can't apply to community cats
- Leash and license laws *intend* to reduce nuisance, harm and costs
- Abandonment laws *intend* to protect welfare and prevent suffering
- Both intents better served by RTF than relocation or euthanasia
- Extensive precedent for RTF in presence of leash, license, abandonment laws



Key Legal Issues to Consider

SEE ALSO: [Community Cat Programs Handbook: Stray and Feral Cats Resource](#)

Introduction

Before a community cat program (CCP) can be launched, it's important to understand how the various aspects of the program relate to all relevant state and local laws and regulations. Given the number and complexity of provisions and jurisdictions that can come into play, ensuring such compliance can be challenging, but not impossible.

Although this guide cannot address all possible legal and policy concerns, it does provide an overview of the key issues that must be considered by any organization interested in operating a CCP. When it comes to the laws governing CCPs, there is simply no such thing as one-size-fits-all. The overview of key provisions included in this section are therefore merely intended as guideposts along the legal landscape – to initiate discussion and prompt further research among enforcement personnel, advocates, shelter staff, elected officials and others interested in the topic. The [appendix](#) provides several examples of actual code along with a brief description of its implications for CCPs.

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Ideal legislation

- *Community Cat* means any free-roaming cat that may be cared for by one or more residents of the immediate area who is/are known or unknown; a community cat may or may not be feral.
- Community cats shall be distinguished from other cats by being sterilized and ear tipped; qualified community cats are exempt from licensing, stray and at-large provisions of this ordinance and may be exempt from other provisions directed toward owned animals.
- Feeding not required but may be regulated:
 - On private property or with consent of owner
 - In appropriate amounts for daily consumption in appropriate feeding containers
 - Dumping of excess food or placing excess quantities on the ground is prohibited
- If shelter is provided, it shall be unobtrusive, safe and of proper size
- Efforts should be made to sterilize, vaccinate and ear-tip cats that are fed



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