“Putting the Cat Back”

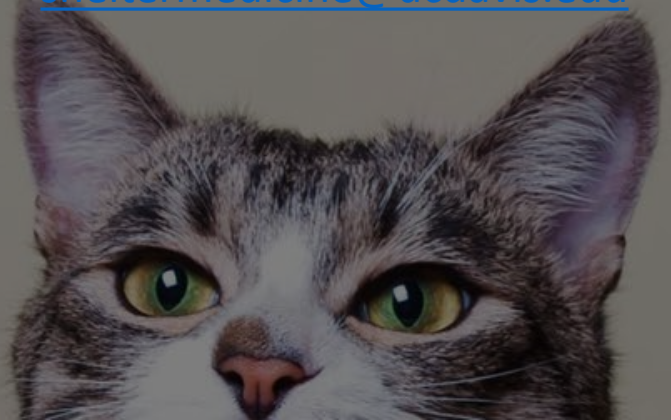
Or, the evolution of Return to Field and TNR diversion programs in North American animal shelters

Kate Hurley, DVM

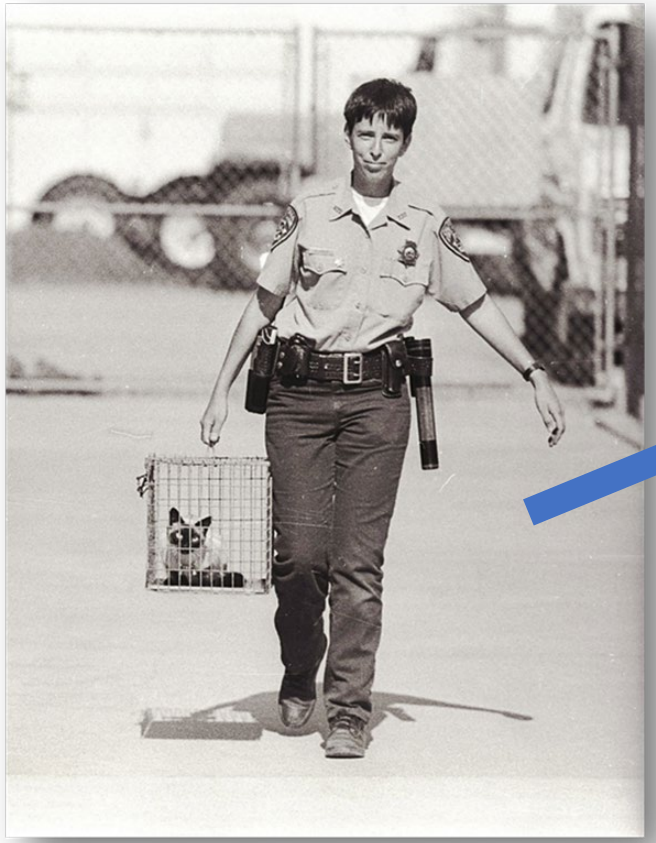
Cindi Delany, DVM

www.sheltermedicine.com

sheltermedicine@ucdavis.edu



Historical pathways



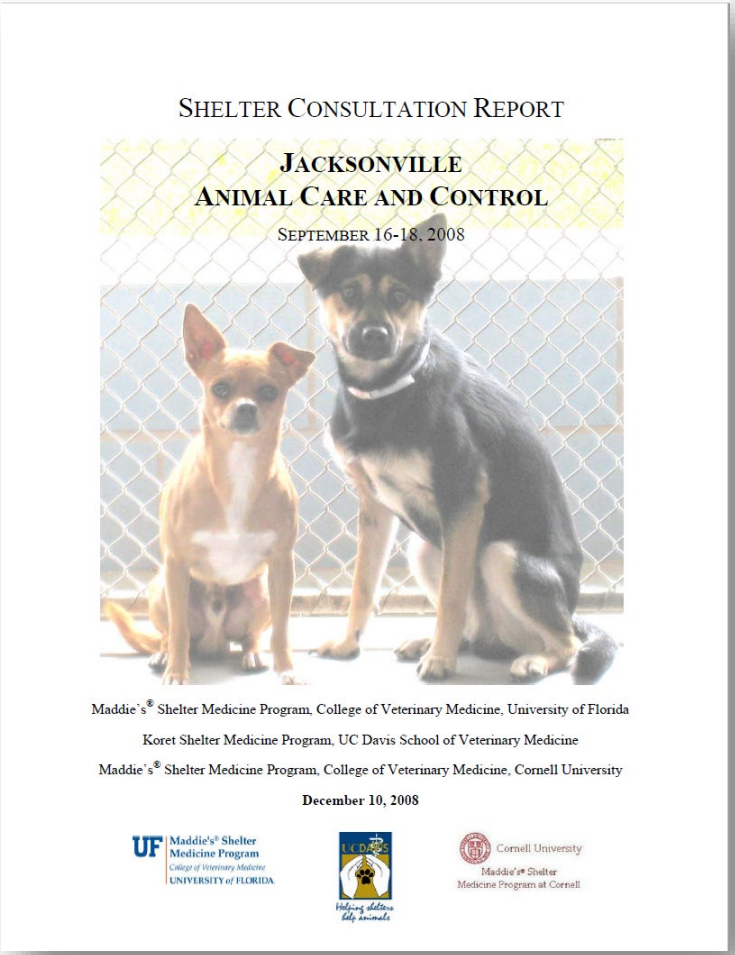
Return to owner

Adoption

Humane euthanasia

Suffering, painful death and/or causing unacceptable problems or risks out in the community

My “aha” moment



SHELTER CONSULTATION REPORT

JACKSONVILLE
ANIMAL CARE AND CONTROL

SEPTEMBER 16-18, 2008

Maddie's® Shelter Medicine Program, College of Veterinary Medicine, University of Florida

Koret Shelter Medicine Program, UC Davis School of Veterinary Medicine

Maddie's® Shelter Medicine Program, College of Veterinary Medicine, Cornell University

December 10, 2008

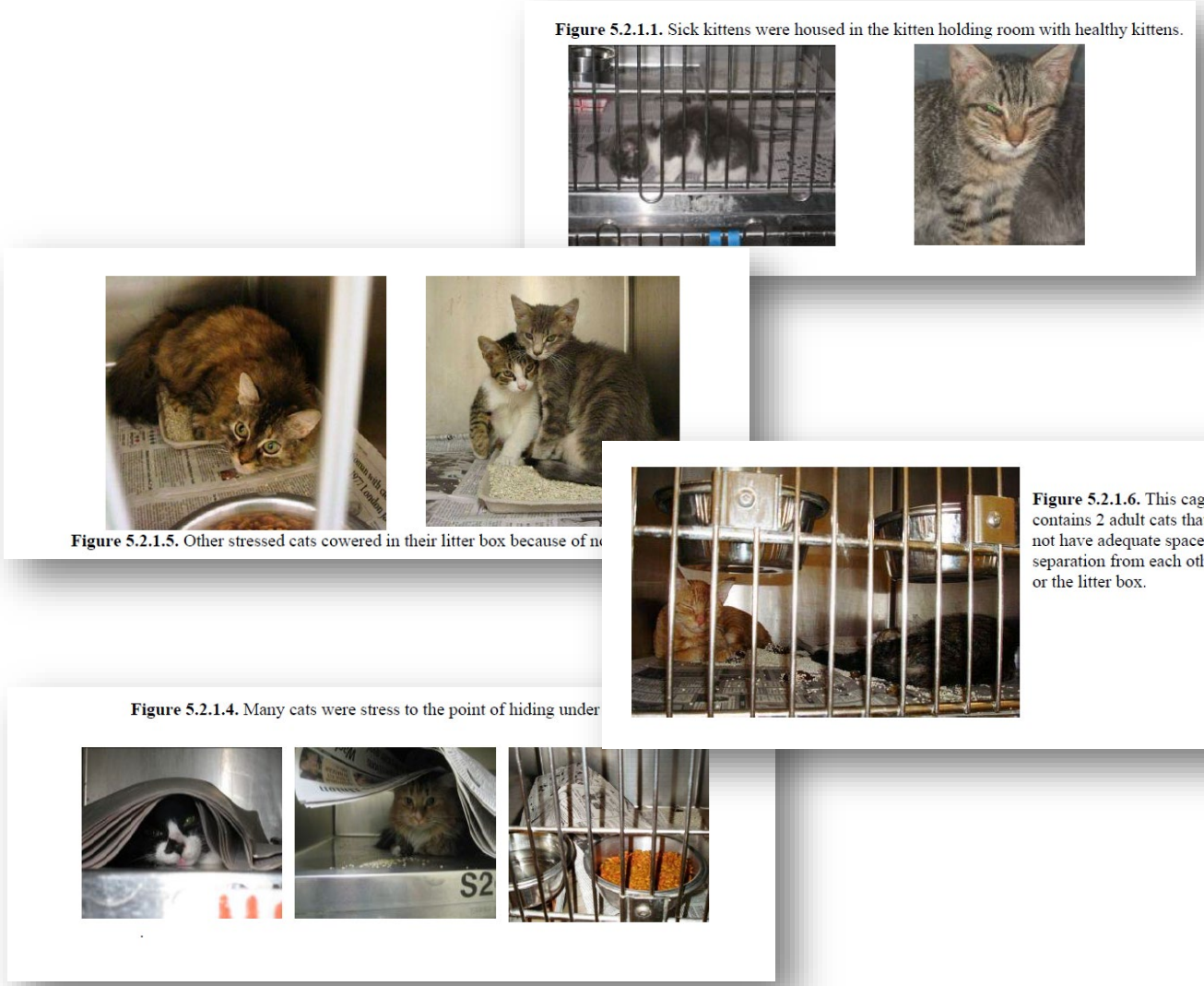


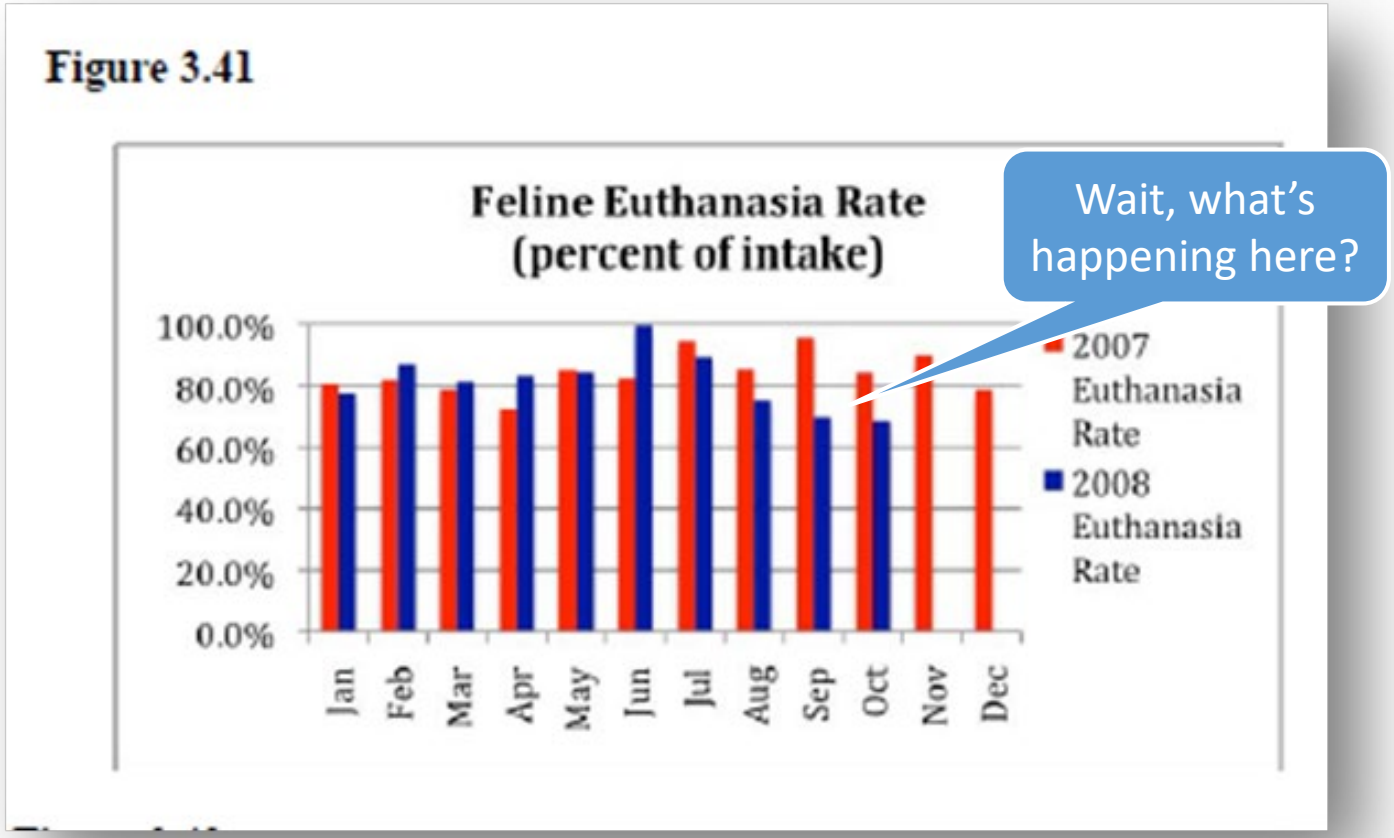
Figure 5.2.1.1. Sick kittens were housed in the kitten holding room with healthy kittens.

Figure 5.2.1.5. Other stressed cats cowered in their litter box because of n

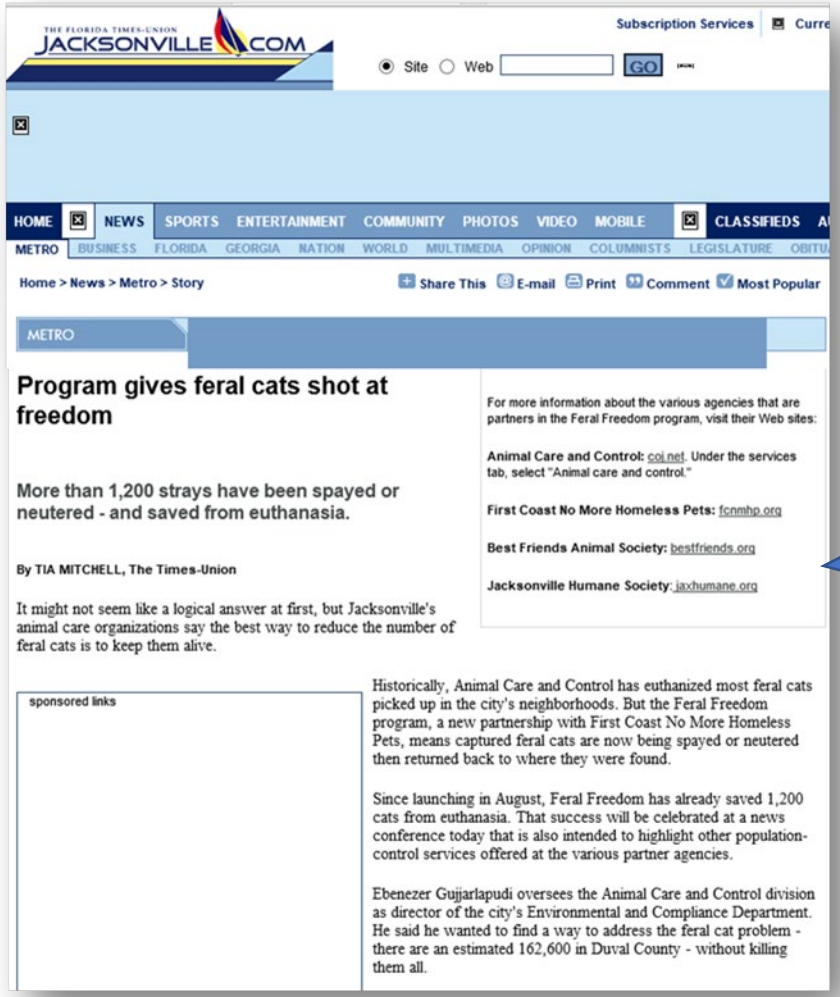
Figure 5.2.1.6. This cage contains 2 adult cats that do not have adequate space for separation from each other or the litter box.

Figure 5.2.1.4. Many cats were stress to the point of hiding under

Underlying problem



You're doing what now?



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METRO

Program gives feral cats shot at freedom

More than 1,200 strays have been spayed or neutered - and saved from euthanasia.

By TIA MITCHELL, The Times-Union

It might not seem like a logical answer at first, but Jacksonville's animal care organizations say the best way to reduce the number of feral cats is to keep them alive.

For more information about the various agencies that are partners in the Feral Freedom program, visit their Web sites:

Animal Care and Control: coj.net. Under the services tab, select "Animal care and control."

First Coast No More Homeless Pets: fcnmhp.org

Best Friends Animal Society: bestfriends.org

Jacksonville Humane Society: jaxhumane.org

sponsored links

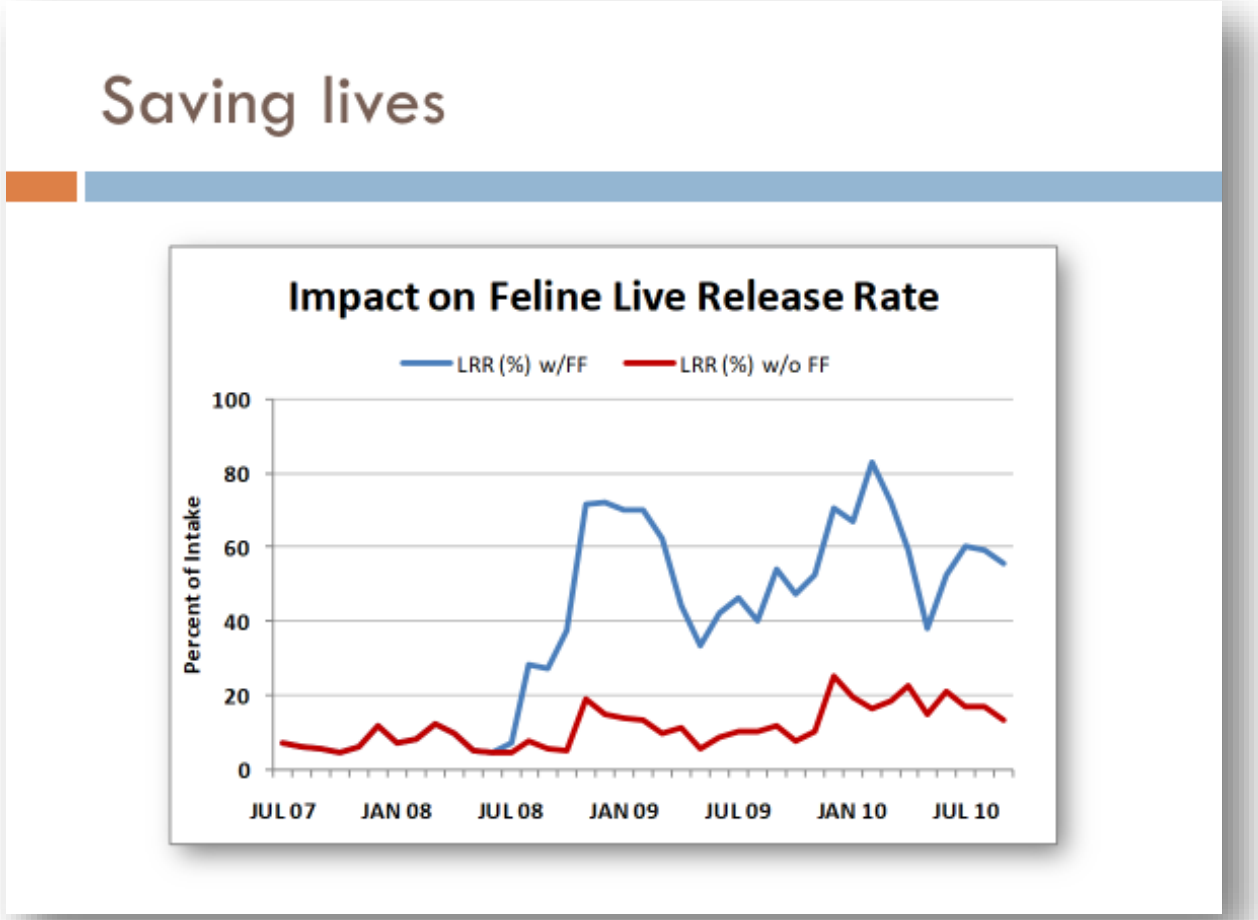
Historically, Animal Care and Control has euthanized most feral cats picked up in the city's neighborhoods. But the Feral Freedom program, a new partnership with First Coast No More Homeless Pets, means captured feral cats are now being spayed or neutered then returned back to where they were found.

Since launching in August, Feral Freedom has already saved 1,200 cats from euthanasia. That success will be celebrated at a news conference today that is also intended to highlight other population-control services offered at the various partner agencies.

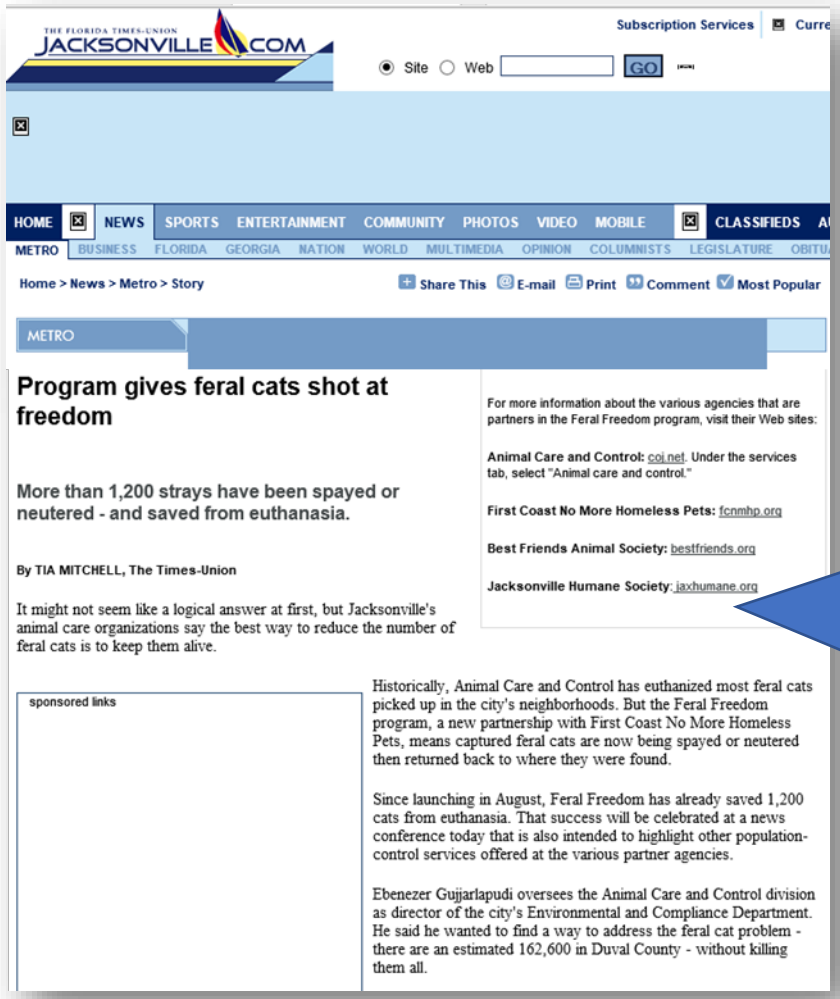
Ebenezer Gujjarlapudi oversees the Animal Care and Control division as director of the city's Environmental and Compliance Department. He said he wanted to find a way to address the feral cat problem - there are an estimated 162,600 in Duval County - without killing them all.

City Animal Care and Control workers still will pick up feral cats when they receive complaints or spot roamers in neighborhoods. But instead of taking the cats to a shelter…the cats are spayed or neutered, their ears clipped for identification purposes and a microchip is inserted under their skin so they can be tracked. Once the animals recover from surgery, they are returned back to where they were found.

No surprise here



But really?



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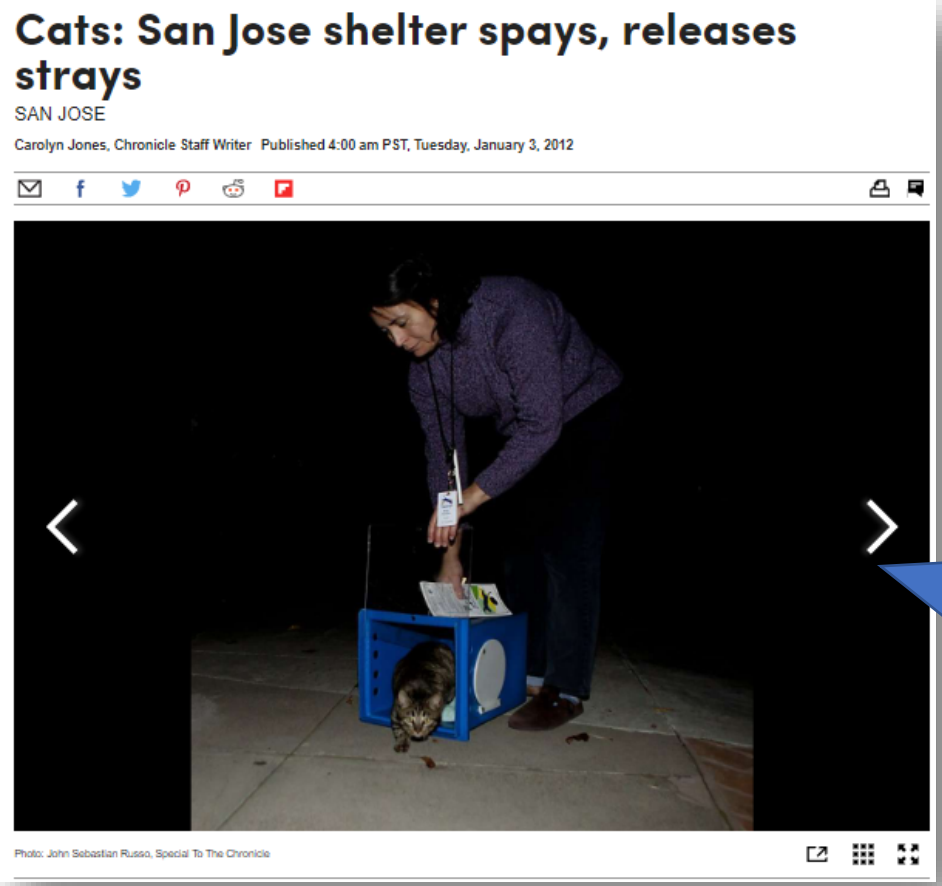
It might not seem like a logical answer at first, but Jacksonville's animal care organizations say the best way to reduce the number of feral cats is to keep them alive.

Let’s try that here



Cats: San Jose shelter spays, releases strays

SAN JOSE

Carolyn Jones, Chronicle Staff Writer Published 4:00 am PST, Tuesday, January 3, 2012

Photo: John Sebastian Russo, Special To The Chronicle

San Jose's animal shelter is among the first in the country to try a new approach to dealing with feral and stray cats. Instead of euthanizing those that aren't adoptable, the shelter spays or neuters them and releases them back to the vacant lot or back alley from which they came.

(The shelter director) said the shelter and Audubon Society ultimately have the same goal: to see fewer feral and stray cats in the world. Over time, with enough cooperation from people, the trap-and-release method will work, he said. The alternative is to continue euthanizing cats that don't have owners, a policy that's shown limited results, he said

New pathway

- Return to owner
- Adoption
- Return to Field/SNR
- Humane euthanasia
- Suffering and/or causing unacceptable problems or risks out in the community

It worked!

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. Johnson[1] and Jon Cicirelli[2]

[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%

Not a fluke

animals MDPI

Animals (Basel). 2018 Apr; 8(4): 55.
Published online 2018 Apr 13. doi: 10.3390/ani8040055

PMCID: PMC5946139
PMID: 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,*]

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

Why?

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.

The truth about carrying capacity

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]

[A]School of Biological Sciences, A08, Un
[B]Department of Primary Industries, Parks
Tas. 7000, Australia.
[C]PO Box 120, Richmond, Tas. 7025, Au
[D]Corresponding author. Email: Billie.Laz

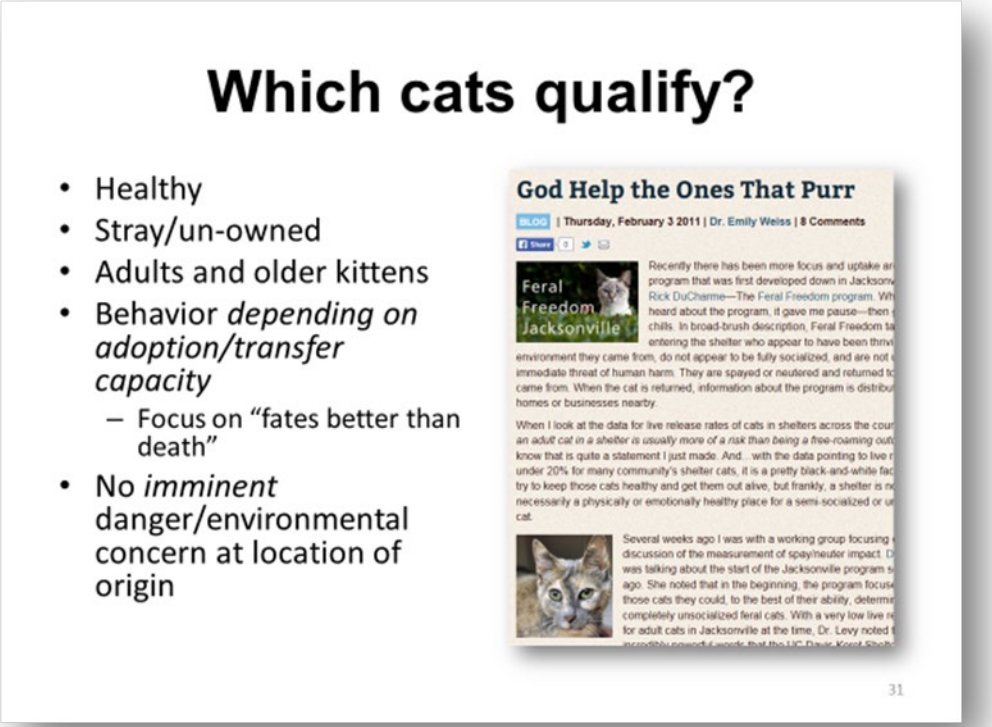
"Contrary to expectation, the relative abundance and activity of feral cats increased in the cull-sites, even though the numbers of cats captured per unit effort during the culling period declined. **Increases in minimum numbers of cats known to be alive ranged from 75% to 211% during the culling period,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

Benefits of RTF for feral cats

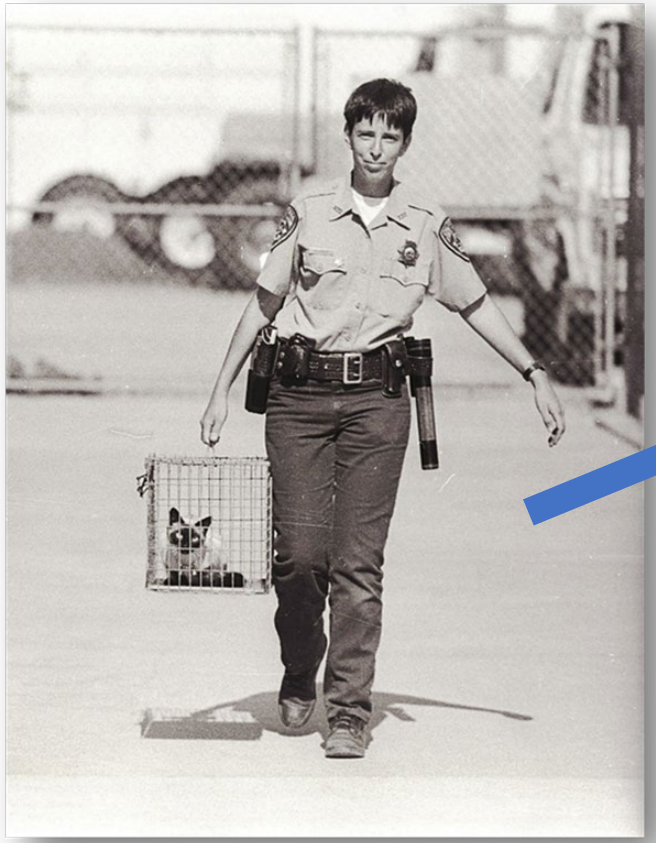
- Reduces crowding, illness and euthanasia in shelters
- Reduces feline birth and translocation with associated risks
- Addresses the source of many nuisance complaints
- *Stabilizes community cat populations more effectively than other available tools*

What about friendly cats?

- Originally adoption was preferred over RTF where capacity existed
- Adoptive homes saved for cats that can't go back
- Provide "Fates better than death" only for those that exceed adoption capacity

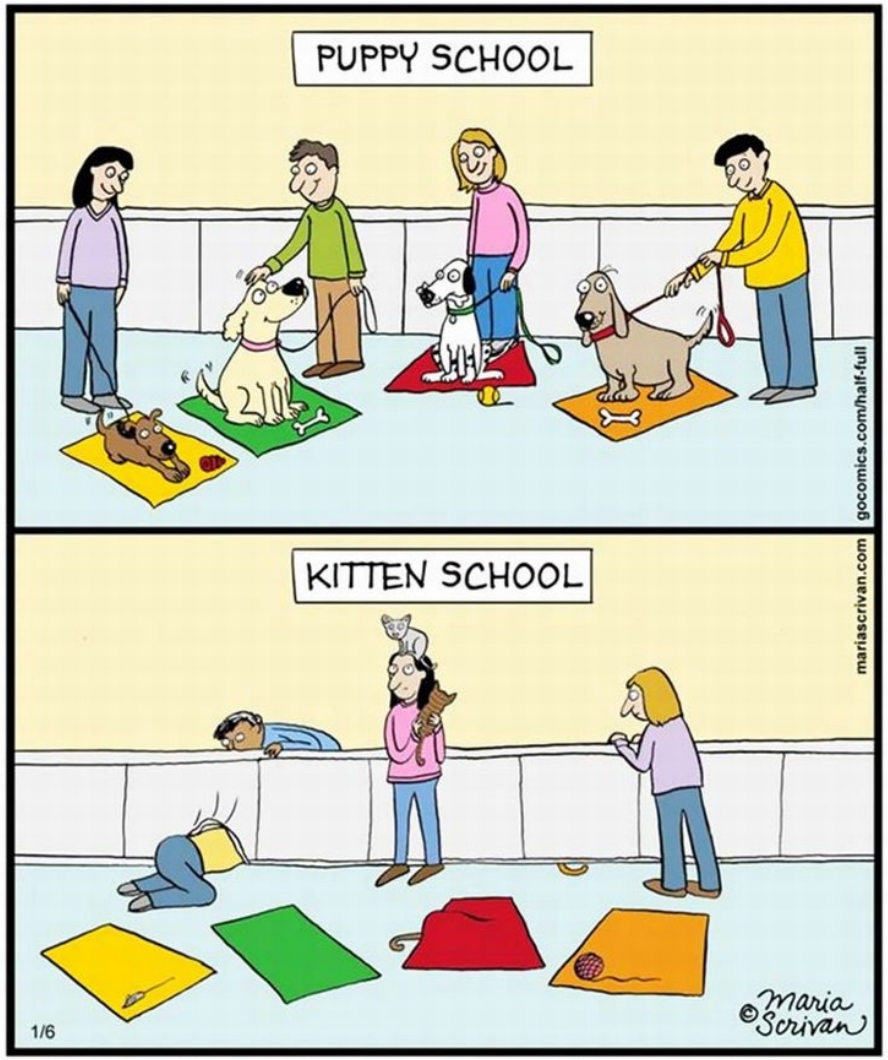


But remember this?



- Return to owner
- Adoption
- Humane euthanasia
- Suffering, painful death and/or causing unacceptable problems or risks out in the community

One difference between cats and dogs



Another difference between cats and dogs

Fewer than 1 in 10 cats recovered by a call or visit to a shelter

This was in 2007

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; Päivi 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.

Procedures—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 [66%]) 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% (posting neighborhood signs). Only 26 of the 138 (19%) cats had some type of identification at the time they were lost (ie, identification tag, rabies tag, or microchip). Owners allowed 82 (59%) cats to spend at least some time outdoors. The percentage of sexually intact cats recovered by their owners (4/16 [25%]) was significantly lower than the percentage of neutered cats recovered (69/122 [57%]).

Conclusions and Clinical Relevance—Results suggest that the percentage of lost cats recovered by their owners is low, possibly in part because of the lack of use of traditional identification methods and the general acceptance that cats may roam. Veterinarians can help educate owners about the importance of identification and the need to keep cats indoors. (*J Am Vet Med Assoc* 2007;230:217–220)

Cats have surpassed dogs as the most popular pet in the United States, with American households owning an estimated 72 million cats in 2002.[1] Even more so than dogs, cats that stray from their homes are at risk for injury and death. Given the emotional attachment that many owners have to their pets, having a cat stray from its home may be particularly stressful to the owner.

Various methods have been used to reunite stray cats with their owners (eg, identification tags and microchips) or to recover cats that have strayed (eg, placing an advertisement in the newspaper, posting signs in the neighborhood, and contacting local animal shelters). However, the effectiveness of these various methods in the recovery of lost cats has not been evaluated. The purposes of the study reported here, therefore, were to characterize the process by which owners search for lost cats and identify factors associated with time to recovery. The present study was performed at the same time as a similar study[2] of the methods owners use to search for lost dogs.

From the Department of Veterinary Preventive Medicine, College of Veterinary Medicine (Lord, Wittum, Rajala-Schultz), and the School of Public Health (Ferketich), The Ohio State University, Columbus, OH 43210; and the National Food Safety and Toxicology Center, 165 Food Safety and Toxicology Building, East Lansing, MI 48824-1302 (Funk).

Supported by the Kenneth A. Scott Charitable Trust, a KeyBank Trust.

Presented in part at the Conference of Research Workers in Animal Diseases Annual Meeting, St Louis, December 2005.

Address correspondence to Dr. Lord.

Materials and Methods

Location of study—The study was conducted in Montgomery County, Ohio, in 2005. At the time of the study, the county had approximately 550,000 residents,[3] of which 160,000 resided in the city of Dayton,[4] and a single major newspaper, the *Dayton Daily News*. The state of Ohio did not have any laws governing the control of cats at the time of the study, although individual municipalities did have the power to establish their own laws regarding cats. Five of the local municipalities in Montgomery County at the time of the study contracted with the county dog warden agency to handle stray cats in the municipality. Minimum holding period specified by most of the municipalities was 3 days. Two nonprofit humane societies in the county also handled stray and owner-surrendered cats. Together, the Montgomery County dog warden agency and 2 humane societies handled approximately 6,500 cats in 2005. All 3 agencies scanned incoming cats for microchips and implanted microchips in cats adopted from the agency.

Study population, sampling frame, and study design—The general methods of the study were similar to those described for a parallel study involving lost dogs.[2] The study population consisted of a cohort of cats that had been identified as missing by their owners through placement of an advertisement in the lost-and-found portion of the classified section in the *Dayton Daily News* or through contact with 1 of the

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

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

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

Design—Cross-sectional study.

Sample Population—Owners of 187 dogs lost in Montgomery County, Ohio, between June 1 and September 30, 2005.

Procedures—A telephone survey was conducted.

Results—132 of the 187 (71%) dogs were recovered; median time to recovery was 2 days (range, 0.5 to 21 days). Dogs were recovered primarily through a call or visit to an animal agency (46 [34.8%]), a dog license tag (24 [18.2%]), and posting of neighborhood signs (20 [15.2%]). Eighty-nine (48%) dogs had some type of identification at the time they were lost (ie, identification tag, dog license tag, rabies tag, or microchip). Owners had a higher likelihood of recovery when they called an animal agency (hazard ratio, 2.1), visited an animal agency (1.8), and posted neighborhood signs. Dogs that were wearing a dog license tag also had a higher likelihood of recovery (hazard ratio, 1.6). Owners were less likely to recover their dogs if they believed their dogs were stolen (hazard ratio, 0.3).

Conclusions and Clinical Relevance—Results suggest that various factors are associated with the likelihood that owners will recover a lost dog. Both animal agencies and veterinarians can play a role in educating dog owners on the importance of identification tags, licensing, and microchips and can help to emphasize the importance of having a search plan in case a dog is lost. (*J Am Vet Med Assoc* 2007;230:211–216)

Dogs and cats are enormously popular as companion animals in the United States. In 2002, it was estimated that 36% of American households owned dogs and 32% of American households owned cats.[1] Not only are dogs and cats popular, but their owners consider them part of the family. In the 2004 American Animal Hospital Association Pet Survey, 50% of respondents indicated they would choose a dog or cat as their sole companion if stranded on a desert island, and 56% said they would be very likely to risk their lives to save their pets.[2]

A pet that strays from its home can be at serious risk for starvation, injury, or death. Also, given the strength of the human-animal bond and the emotional attachment that many owners have to their pets, having a pet stray from its home can be traumatic and distressing for the owner. Thus, veterinarians may provide a benefit to both their patients and their clients by counseling pet owners on methods to prevent lost pets and effective means to ensure the rapid recovery of pets that do become lost. Traditionally, owners have identified their pets with tags on the pets' collars and have placed advertisements in newspapers or searched local animal shelters to recover lost pets. Newer technology has led to the use of implanted microchip identification methods and Web sites devoted to finding and returning lost pets to their owners. However, the effectiveness of the various methods available for recovering lost pets has not been reported. The purposes of the study reported here were to characterize the process by which owners search for lost dogs and identify factors associated with time to recovery of lost dogs.

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2012 survey

- Random digit dialed national survey of > 1,000 households
- 15% of households had lost a cat
- Of those, 75% were found
  - 1/54 by visit to shelter
  - 48/54 by returning on their own or searching neighborhood

Animals **2012**, *2*, 301-315; doi:10.3390/ani2020301

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Article

Frequency of Lost Dogs and Cats in the United States and the Methods Used to Locate Them

Emily Weiss [1], Margaret Slater [2,*] and Linda Lord [3]

[1] Shelter Research and Development, Community Outreach, American Society for the Prevention of Cruelty to Animals (ASPCA®), 6260 N. Hillside, Wichita, KS 67219, USA; E-Mail: emily.weiss@aspca.org

[2] Shelter Research and Development, Community Outreach, American Society for the Prevention of Cruelty to Animals (ASPCA®), 50 Stone Ridge Drive, Northampton, MA 01602, USA

[3] Department of Veterinary Preventive Medicine, College of Veterinary Medicine, The Ohio State University, Columbus, OH 43210, USA; E-Mail: linda.lord@cvm.osu.edu

* Author to whom correspondence should be addressed; E-Mail: margaret.slater@aspca.org; Tel.: +1-217-855-8394.

Received: 25 April 2012; in revised form: 8 June 2012 / Accepted: 11 June 2012 / Published: 13 June 2012

Consistent results

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

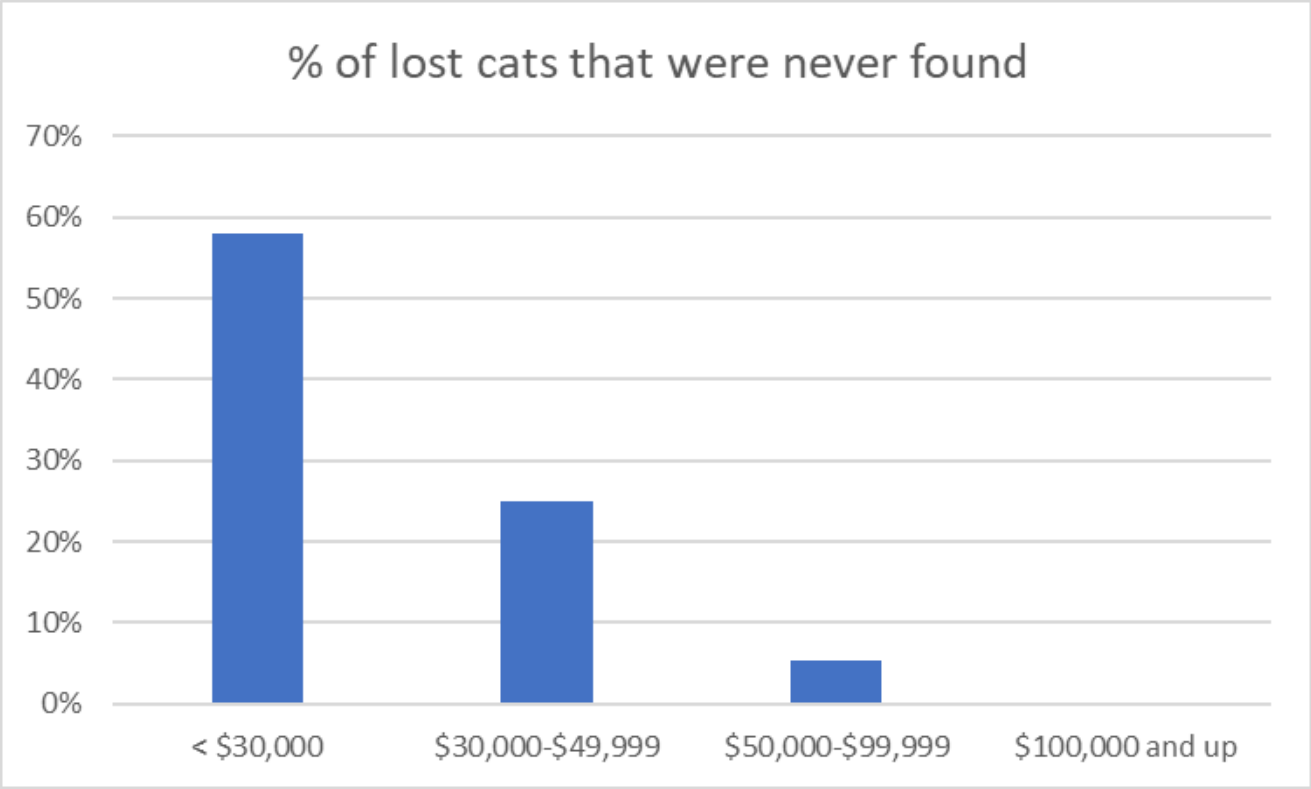
Liyan Huang [1], Marcia Coradini [1,*], Jacquie Rand [1,2], John Morton [3], Kat Albrecht [4], Brigid Wasson [4] and Danielle Robertson [4]

1 Gatton Campus, The University of Queensland, Queensland 4343, Australia; rien@liv
j.rand@uq.edu.au (J.R.)
2 Australian Pet Welfare Foundation, Kenmore, Queensland 4069, Australia; jacquie@pe
3 Jemora Pty Ltd., Geelong, Victoria 3220, Australia, john.morton@optusnet.com.au
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."

Uneven impact



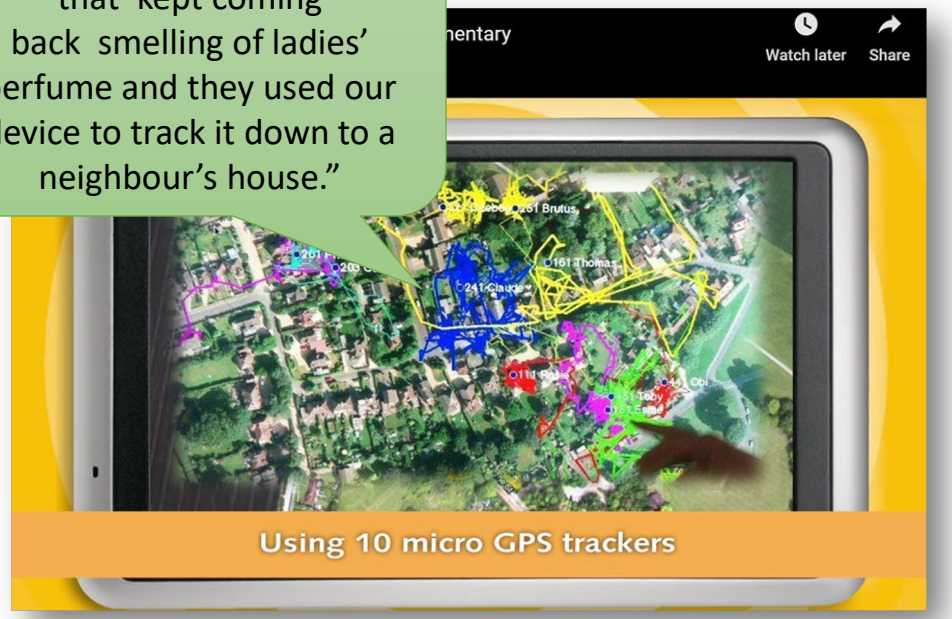
Weiss, E., et al. (2012). "Frequency of Lost Dogs and Cats in the United States and the Methods Used to Locate Them." Animals(2): 301-315.

Return to ~~Field~~ Owner

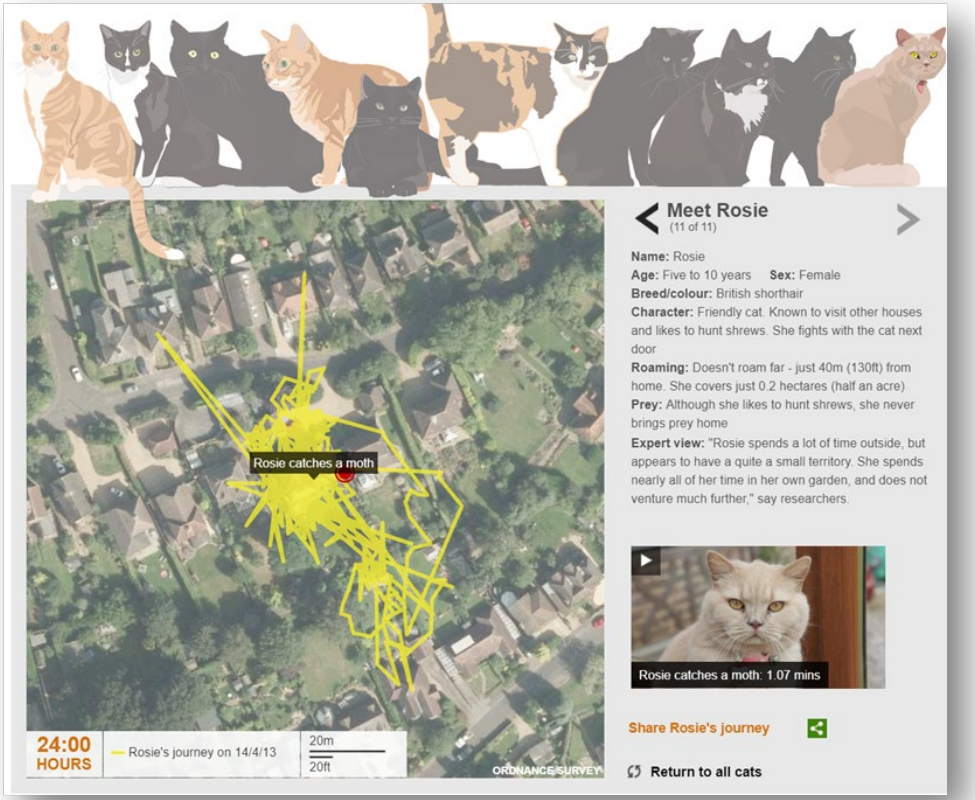
- Return to field for friendly healthy lost cats can bypass the mismatch in timing, search methods, transport barriers and cultural expectations that prevent lost cats from getting reclaimed from shelters
- Spay/neuter/vaccination improves cat health and decreases roaming for cats whose owners might not have the wherewithal to bring them in for those services

Another difference between cats and dogs

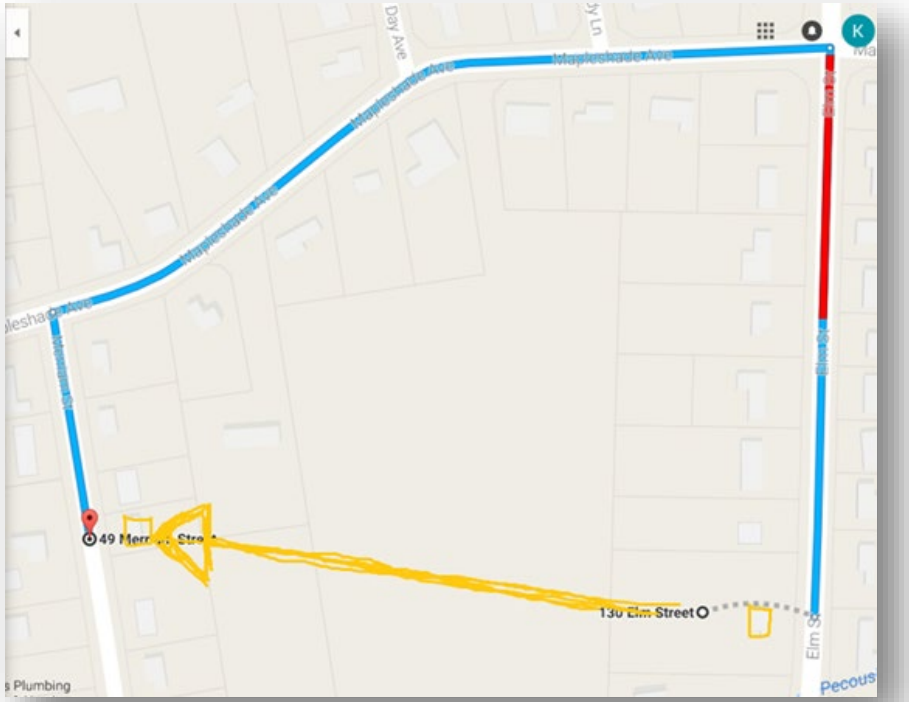
"There was one cat that kept coming back smelling of ladies' perfume and they used our device to track it down to a neighbour's house."

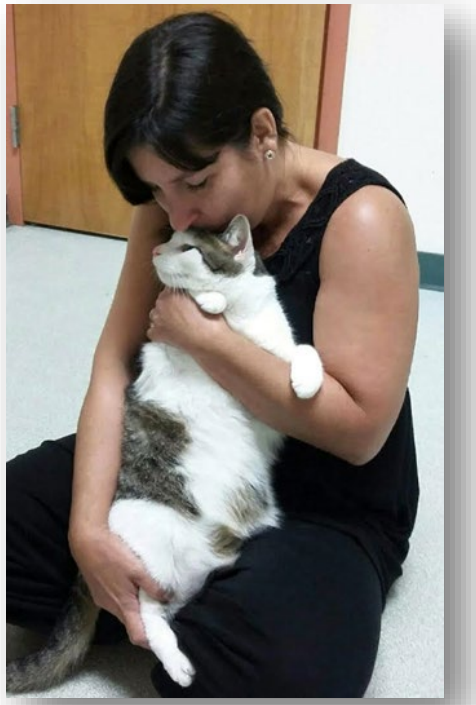


https://www.dailymail.co.uk/sciencetech/article-2340714/The-Secret-Life-Cat-What-mischievous-moggies-gets-owners-backs.html



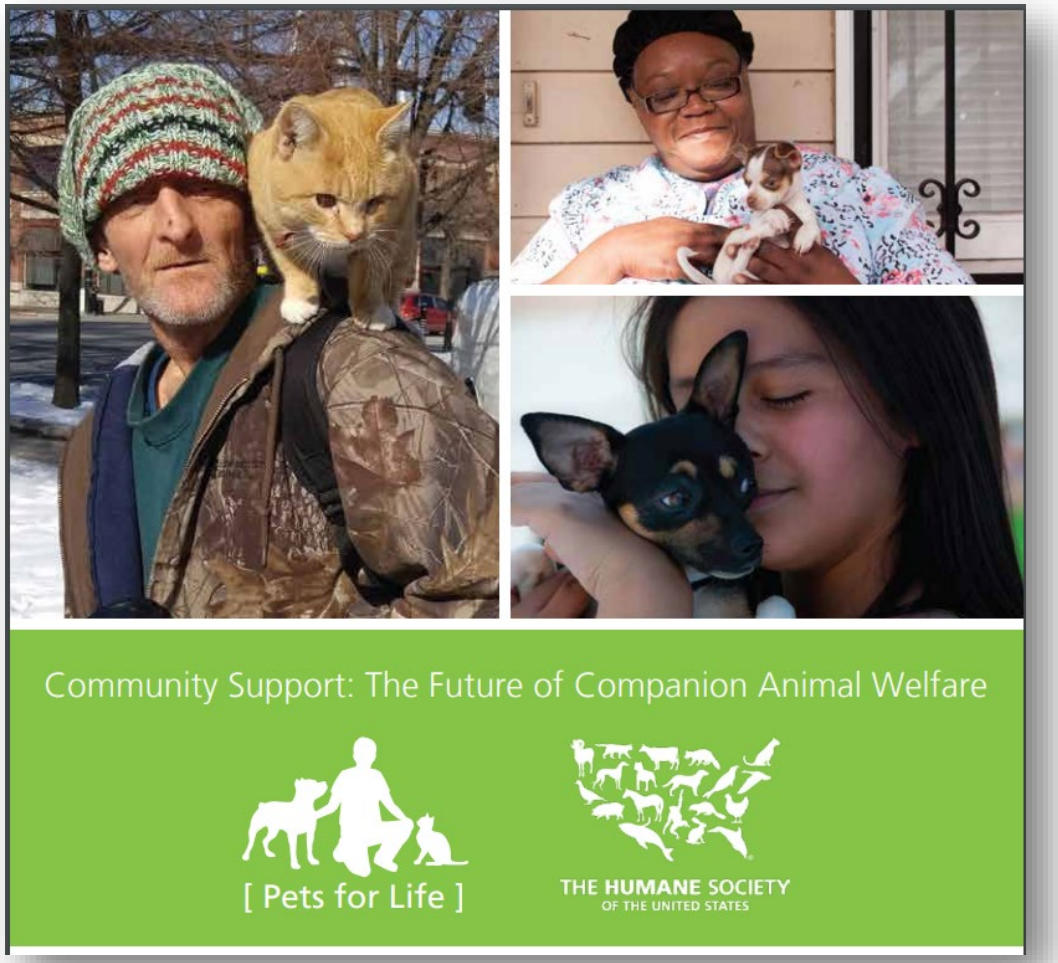
Not all who wander are lost





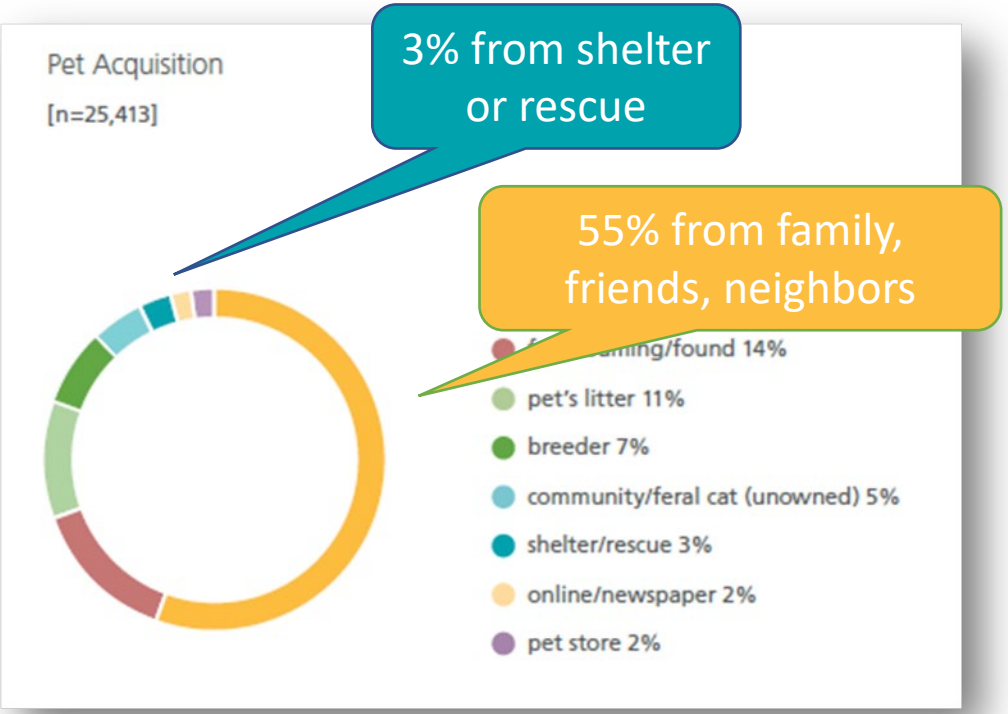
Uneven impact

- 1 in 6 people in America live in poverty
- 1 in 5 people in America speak a language other than English at home
- Cultural norms and expectations as well as access to services can vary
- > 90% of people in underserved communities have never been to a shelter at all



Theory

- Most pets in disadvantaged communities adopted from a source other than a shelter
- Return to field for friendly, healthy pet 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

Practice

"Star is the light of Mayra's life. The snowy-white cat has lived more than 10 years in her Texas home, but one day someone in the neighborhood saw Star outside, scooped her up and brought her to the nearest shelter."

Saving cats at Palm Valley Animal Society in Texas

By Christelle Del Prete | February 17, 2020

Star is the light of Mayra's life. The snowy-white cat has lived more than 10 years in her Texas home, but one day someone in the neighborhood saw Star outside, scooped her up and brought her to the nearest shelter. Not only was it scary for sweet Star, but it could have

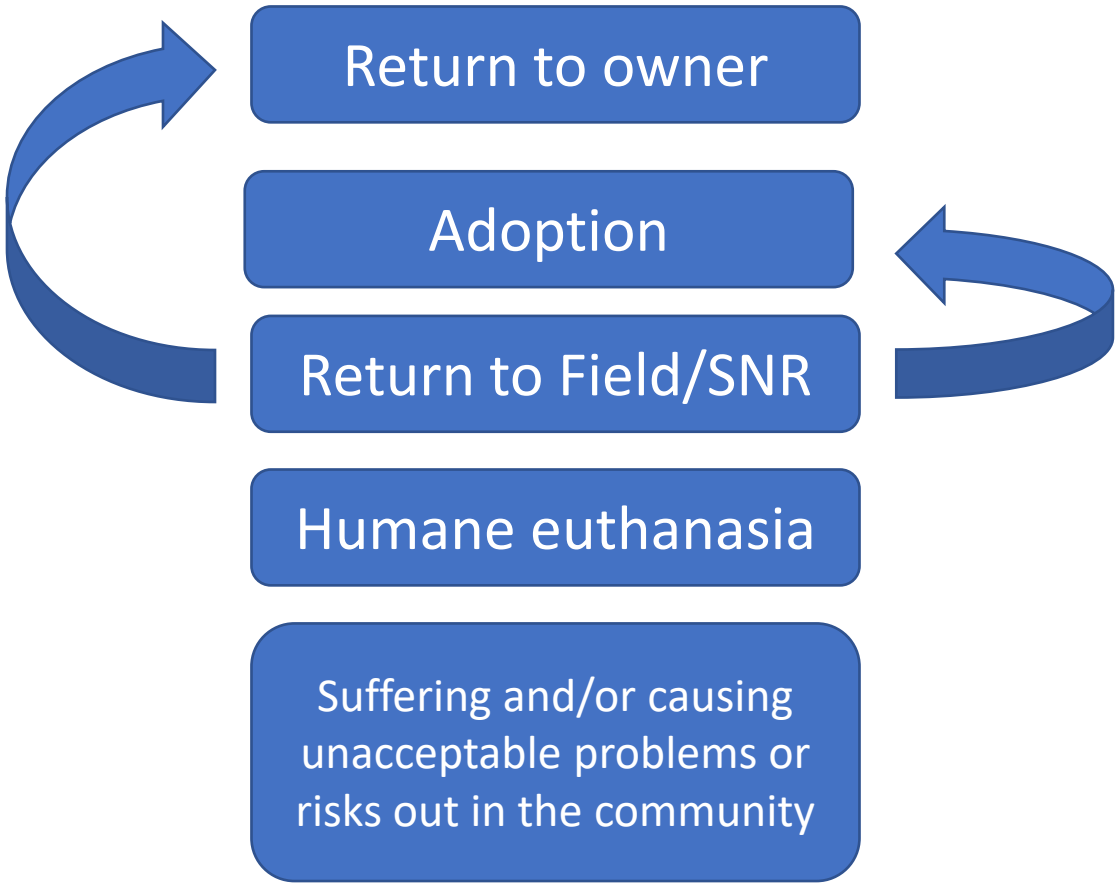
"Prior to the CCP, Star would have joined hundreds of other cats sitting in cages at the shelter, waiting for her family to find her. If she wasn't picked up, she'd be put up for adoption…"

Return to ~~Field~~ Home

"Instead, thanks to the community cat program, Star was examined by veterinary staff, vaccinated and spayed. After recovering from surgery overnight and the next day, Sarah and Marla loaded Star into the CCP van and returned her back to the address where she was originally found.

"That's when Mayra found out that Star wasn't gone for good, but she was right there and happy to be home. Bursting into tears when Star was handed to her, Mayra was not only overjoyed to have her 11-year-old cat back safe at home, but she wanted to help other cats."

New understanding



Bonus result of robust RTF/TNR diversion

- No statewide requirement for healthy cat intake
- California cat stray holding law states “no cat shall be killed before 72 hours”
- RTF/TNR diversion can minimize time in shelter
- Lower density = less staffing needs, better housing for all, lower disease risks, lower costs, better odds for those that do come in

Now more than ever

- Cases reported in cats, lions and tigers from asymptomatic/unknown exposure
- Viral shedding and cat to cat transmission documented in high dose/close contact context
- Crowded conditions and high levels of respiratory symptoms will tend to amplify potential for any pathogen to spread
- Let’s not give this badly behaving virus another opportunity to behave badly!

STUDY CONFIRMS CATS CAN BECOME INFECTED WITH AND MAY TRANSMIT COVID-19 TO OTHER CATS

Posted on May 13, 2020

In a study published today (May 13, 2020) in the New England Journal of Medicine, scientists in the U.S. and Japan report that in the laboratory, cats can readily become infected with SARS-CoV-2, the virus that causes COVID-19, and may be able to pass the virus to other cats.

Professor of Pathobiological Sciences at the University of Wisconsin School of Veterinary Medicine Yoshihiro Kawaoka led the study, in which researchers administered to three cats SARS-CoV-2 isolated from a human patient. The following day, the researchers swabbed the nasal passages of the cats and were able to detect the virus in two of the animals. Within three days, they detected the virus in all of the cats.

Two main lanes of the cat superhighway

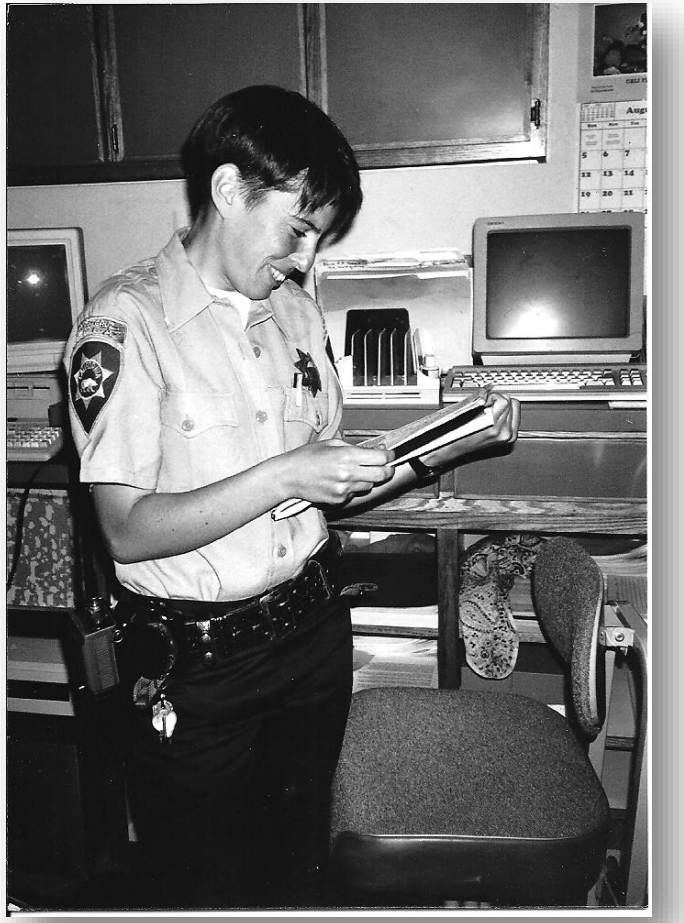
- TNR diversion or RTF for most healthy unowned cats[1]
  - Healthy feral cats to stabilize populations in the community and limit euthanasia at the shelter
  - Healthy friendly stray/free roaming cats to maximize spayed/neutered/vaccinated cats reunited with their families
  - As an avenue to open doors with community members who would not otherwise go to the shelter

[1] Ideally bypassing the shelter or with minimal length of stay

- Shelter pathway for pet cats and social kittens needing new homes[1] 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
  - As an avenue to open doors with community members and encourage engagement with the shelter

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

I wonder what's next that I will learn to think differently about?



Community service vs enforcement

There's been an increase in **civilian** anti-violence work, "whether it's violence interrupters, or street interventionists, or gang outreach workers," says Jannetta. "There is this increasing field of people and they're out doing public safety work. They're **preventing** retaliation. They're **intervening** in conflicts to tamp them down. Sometimes th
engaging with people that they kn
risk of shooting and being shot, an
rapport, and then trying to perhap
get them involved in services or o
them **on a different trajectory**."

It's a difficult time to increase funding for these programs, **as cities reeling** from the COVID-19 pandemic have budget shortfalls. There's a chance, instead, that **some of the programs may be cut,** while police departments remain largely intact. **But the pandemic had also started to provide some evidence of what less police**

Not just a cat thing

The Role of Dog Population Management in Rabies Elimination—A Review of Current Approaches and Future Opportunities

Louise H. Taylor[1*], Ryan M. Wallace[2], Deepashree
Beryl Mutonono-Watkiss[3], Elie Parravani[4] and Louis

[1]Global Alliance for Rabies Control, Manhattan, KS, United States
[2]Centers for Disease Control and Prevention, Atlanta, GA, United States
[3]Humane Society International, Washington, DC, United States
[4]National Wildlife Research Center, United States Department of Agricultu
[5]World Animal Protection, London, United Kingdom
[6]Department of Microbiology and Plant Pathology, University of Pretoria

Free-roaming dogs and rabies transmission are integrally
dog populations can be daunting to rabies control progra
concept that aims to improve the health and well-being o
also aim to reduce dog population size. In theory, DPM c
focused on promoting responsible dog ownership and be
and dog vaccination coverage, thus reducing rabies trans
theoretically reduce dog population turnover and size, all
However, it is important to understand local dog populat
whether and how DPM might contribute to rabies contro
there is very limited evidence of DPM tools achieving red
endemic areas. Different DPM tools are frequently used t
assessments of DPM programs are not usually available.

Mass Dog Culling is Not an Effective DPM Tool

Mass dog culling is still used as a misguided emergency response to rabies outbreaks, based on the mistaken belief that reducing the size of dog populations will reduce rabies transmission (38). In fact, mass dog culling has been shown to have no long-term impact on the control of rabies within cities (36, 39, 40) or across countries such as Ecuador, Indonesia and Bangladesh (19, 41–43). **When modeled in realistic scenarios, culling is not as effective as sterilization programs at reducing population size in the long term (44). This is because culling does not address the source of new or replacement animals, and has only a temporary effect on population size. Furthermore, rapid dog replacement rates have been documented in some areas** following culling, leading to a younger population of generally rabies-susceptible dogs (45, 46).

Yes, BUT…