ATTACHMENT C

Agreement between City of Torrance Parks and Recreation Department and Concerned Caregivers Regarding the Feral Cats at Wilson Park

Goal: Guidelines mutually developed to insure worker/public health and safety and health/safety of cats.

Caregivers will:

1. Provide food and water for compound cats. **In compliance.**
2. Feed only in area(s) designated by the City. **Not in compliance.**
3. Clean feeding area(s). Set out anti-ant products. **Not in compliance.**
4. Clean up feline feces at least once a week in whole compound and in feeding area. **Not in compliance.**
5. Provide flea control for cats and feeding area. **Not in compliance.**
6. Not duplicate gate key. **Unknown.**
7. Turn in gate key if unable to continue feeding. **Not in compliance.**
8. Inform City of Torrance of any changes in caregivers' telephone numbers. **Not in compliance.**
9. Not damage park facilities while providing care for the cats. **Previously not in compliance. Now appear to be complying.**
10. Be available for emergency situations. **Not in compliance due to #8.**
11. Provide adoption for cats when possible. **Unknown. Currently not in compliance with kittens.**
12. Diligently trap cats in a humane manner to insure on-going de-sexing and provide health services including, but not limited to, vaccinations and de-fleaing. **Not in compliance.**
13. Provide a quarterly report to include number of cats in colony, trapped, de-sexed, required veterinary care, and number of cats adopted. **Not in compliance.**
14. Assist in public information regarding pet abandonment and Feral cats. **Unknown. Doubtful if in compliance.**
15. Work with The City of Torrance for welfare of the Feral cats at Wilson Park. **Not in compliance. No official contact with feeders.**
16. Not physically or verbally harass or intimidate City employees or the general public. **No incidents reported so assumption is they are in compliance.**
17. Insure compliance with all terms of this agreement from all persons feeding the cats. **Not in compliance.**
18. Agree to the terms of this mutual letter for the benefit of the Feral cats at Wilson Park. **Not in compliance with all terms.**
19. Be cautious and use City facilities in a safe and prudent manner and notify the City of any conditions that may be hazardous (to humans). **Not in compliance.**

20. Hold the City harmless for any injuries and, or damages resulting from their actions while providing care for feral cats. No **injuries, damages or illness reported to the City.**
21. Defend, indemnify and hold harmless the City from any and all claims and lawsuits that result from their activities as a caregiver. **Unenforceable since original signer of document is no longer involved in care giving and those that are feeding are officially unidentified.**

City of Torrance Parks and Recreation Department will:

1. Provide caregivers with (3) keys to locked gate on South side ramp (next to red car). **No longer relevant since Red Car has been relocated to a new area which is not a designated feeding area but is being used as such.**
2. Notify all caregivers of any need to change locks and provide new keys prior to actual change. **No phone numbers have been made available of the current care givers.**
3. Allow caregivers access to compound one day a week (minimal) for fecal clean-up. **Access is available but not exercised for flea control or feces clean up.**
4. Inform caregivers of any kittens, and sick or injured cats. **Care givers recently informed of kittens but no action taken by care givers.**
5. Allow caregivers access to compound buildings if kittens, sick or injured cats are observed for rescue. **See #3.**
6. Allow caregivers to trap any cats for de-sexing, health care or rescue. **No trapping has occurred to our knowledge. No reports have been given to the City.**
7. Inform caregivers of dates for demolition and construction and allow caregivers to check for all kittens or cats. **Will be complied with but, see #2.**
8. Provide approved signs regarding:
   a. Pet abandonment regulations. **In compliance.**
   b. Feline feeding program. **No signs posted.**
9. Provide public with information regarding pet abandonment and Feral cats, and, if possible information regarding de-sexing. **Possibly complied with through Animal Control.**
10. Maintain compound area - fences and buildings. **In compliance.**
11. Clear and maintain weed/plants on North side culvert area. Dead palm leaves to be left during winter/rainy season to provide shelter for cats. (TBD) **In compliance.**
12. Inform all Park Employees and H.I.P. Employees of this agreement and insure their compliance. **In compliance.**
13. Inform all park, H.I.P. and other affected City Personnel not to verbally or physically harass caregivers. **In compliance.**
14. Agree to the terms of this agreement for the benefit of the Feral cats at Wilson Park and Park Employees. **In compliance.**

NONCOMPLIANCE WITH TERMS OF THIS AGREEMENT WILL RESULT IN ITS REVOCATION. UPON REVOCATION, THE CITY WILL EXERCISE ITS RIGHT TO MANAGE THE CAT POPULATION AS IT DETERMINES NECESSARY.

This agreement is revocable by the City at any time and will be reviewed in one year.

Gail S. Morgan Wilson Park Cat Caregiver Rep. 22034 Normandie Avenue Torrance, CA 90502	Date	Gene Barnett Parks and Recreation Director	Date

(310) 618-0973

JJ:MW:dle:prks&fac\wilson\ferlagremt

ATTACHMENT #2

ATTACHMENT #2

CITY OF TORRANCE

POLICE DEPARTMENT

TO: Linda Cessna **DATE:** 1/24/2007

FROM: Patrick Wren - Animal Control

SUBJECT: Concerns - Re: Feeding Feral Cats

After discussing the topic of feeding feral cats in our City with the animal control staff, here is a short list of our concerns.

COMPLAINTS FROM LOCAL RESIDENTS

Residents Southeast of Wilson Park have come to animal control to enlist assistance to remedy the health issue with the cats. The residents complain to Animal Control about the cats defecating in their yards and gardens. They have taken the position that the City needs to step in and "fix" the problem. At this time Animal Control has nothing that it can offer.

COMPLAINTS FROM LOCAL BUSINESSES NORTH OF PARK

Property Management from the businesses directly North from the Animal Control Compound have notified Animal Control that the feeders have created a health issue with the food that is left behind by the feeders as well as the animal feces that are deposited in garden areas of their businesses. Property Managers are looking to the City to "fix" the problem. Property Managers has escalated their concerns to their legal representation. At this time Animal Control has nothing that it can offer.

THE LITTER NUISANCE LEFT BEHIND BY THE FEEDERS

Animals are being fed via plates, boxes and in some case food being dumped on the ground. The food that is left behind is now open to predatory animals, roaches, rats, etc. This creates a tremendous health concern and does not leave an impressive picture on how our City is maintained.

IMPACT OF FEEDING ON LOCAL WILDLIFE

On a daily basis Animal Control picks up deceased wildlife (skunks, raccoons, opossum's) in the very close proximity of feeder locations. Food is left out for feral cat colonies, the cats do not finish the food and the wildlife usually finishes what is left behind. They wander onto Madrona, Praririe, 190th, Arlington, Crenshaw, etc. and are struck by vehicles. This is another example of the impact that feeders have on local wildlife.

ATTACHMENT #3

ATTACHMENT #3

City of Torrance

FERAL CATS
December, 2006

PRIMARY POINTS

- SAFETY OF RESIDENTS
- RESPONSE TO COMMUNITY IDENTIFIED PROBLEM
- PREVIOUS NEGOTIATED CONTRACT NOT BEING HONORED
- REFERED TO ENVIRONMENTAL QUALITY AND ENERGY CONSERVATION COMMISSION, FEBRUARY 1, 2007

Several years ago, the City of Torrance developed a program to manage feral cat population, by implementing a T-N-R Program (trap-neuter-return) to reduce population count, and designated specific feeding locations (north side of the park & south side of ramp (next to red car).

Because the agreement has not been honored, the city rescinded its agreement effective November 1, 2006.

- **CURRENT ISSUE**
  - Concerned caregivers for feral cats (Codelle Perez *advocate/feeder)* have been indiscriminately feeding feral cats in various locations besides those specified in a previous agreement with the City of Torrance.
  - This type of feeding is NOT within the Agreement. It also resulted in the park becoming a depository for more abandoned feral cats, attraction of other feral animals. Excessive feral animals create an unhealthy presence of feces and fleas, which are harmful to park visitors and the neighboring community.

- **CITY'S PURPOSE OF ADDRESSING ISSUE ONCE AGAIN**
  - The presence of harmful matter coming from feral cats and other feral animals raises a concern for the City whose priority is ***to ensure the public's safe and healthy well-being by ensuring public facilities are safe and promote healthy living for all members of the community.***
  - The City also works to employ an approach that treats animals humanely.

- **PROPOSED APPROACH**
  - Introduce a ban on feeding of feral cats to curtail growing population and mitigate harmful impacts on the community
  - What about existing cats?

- **OTHER OPTIONS**
  - Refer issue to a Committee of the Council or Commission for review.

City of Torrance

- ***Background of Issue***
  - In 1999, City staff received complaints about the potential health and safety hazard resulting from feral cat feces and vomit in and around Wilson Park; such matter also drew fleas into the area that is frequented by parents and children.
  - With the public's safety as a priority and with the humane treatment of feral cats in mind, City drafted an agreement with feral cat caregivers to carefully manage the existing feral cat population (hopefully decreasing it in time through adoption) and mitigate its negative impacts on the community.
  - The City developed a program to manage feral cat population, by implementing a T-N-R Program (trap-neuter-return) to reduce population count, and designated specific feeding locations (north side of the park & south side of ramp (next to red car).
  - The City's animal control also works to transport trapped cats to shelters where they are set up for adoption. Those not fit for adoption are ones being fed continually and causing the current issue.
  - With the evidence of non-compliance on certain points of the Agreement by concerned caregivers, City revoked the agreement as of November 1, 2006.

ATTACHMENT #4

ATTACHMENT #4

CYPRESS
LAND COMPANY

August 24, 2006

Torrance Animal Control
2200 Jefferson Street
Torrance, CA 90501

RE: Feral Cats
Adjacent to 2255, 2275, 2295 Jefferson Street, Torrance, CA 90501

To Whom It May Concern:

I am writing you on behalf of Cypress Southbay, LLC. Cypress Southbay, LLC owns and manages the properties located at 2255, 2275, and 2295 Jefferson Street in Torrance, California. It has been brought to our attention by our tenant at this location that there is a severe issue with feral cats in the area. They have informed us that these cats are being fed by someone in the community. We investigated this matter further and found house and food containers set up on the other side of our property line which is public property (Please see attachment A).

On August 11, 2006 we were faxed a letter by an employee of our tenant at 2295 Jefferson Street. This employee claimed that one of the stray cats had climbed into his car engine and caused damage to the vehicle. Furthermore, this employee claimed that the situation caused that employee to be at great risk while driving on the freeway. (Please see attachment B)

These feral cats have become a hazard and danger to persons and property in the area. The cause of this problem is from public property. Please take the necessary actions to get this matter resolved including but not limited to: Taking action against those feeding the feral cats, considering trapping the said animals, and removing food containers and their houses that are on public property. If the City of Torrance fails to take action then they are going to be subject to liability claims for personal injury and for property damage.

Thank you for your anticipated cooperation.

Matthew K. Doss
Operations Manager

Enclosures

10940 Wilshire Blvd., Suite 1900 • Los Angeles, California 90024-3930 • (310) 208-8077 • FAX (310) 208-8127

Exhibit B

Diversified
IMAGING SUPPLY

Landlord Supervisor
2255 Jefferson Street
Torrance, CA 90501

August 10, 2006

Dear Sir,

Yesterday evening I went out to my car and started the engine. I heard a loud thump sound when I turned the ignition. I tried to start the engine again and the car started with no problem. I was driving on the freeway and was at about the Rosecrans exit going west when another sound came from the engine and my temperature gauge when to the Red area.

I pulled off the freeway and was able to find a Chevron station with a mechanic on duty. He opened my car hood and found that my Serpentine belt had been pulled off the pulleys. He checked its condition and was not broke or damaged. Upon further review he saw fur and blood in the lower part of the engine compartment. He replaced the belt and the car started okay. It is still running a little rough and I am taking it to my main mechanic to check it out. The car was running excellent before this occurred.

The mechanic says that a Cat had gotten up into my engine and that is what knocked my belt off the pulleys. As it is, this has caused me one and possibly two mechanic expenses that had nothing to do with my car condition. My regular mechanic can attest to this fact.

The fact is that one of these stray cats at the office complex got up into my engine compartment and was hurt or killed when I tried to start my car. While this is regrettable, the real concern for me is that it could have caused and even greater damage to my car or even myself if an accident had occurred because of this on the freeway.

I was told by Bruce Benton (Vice President) that some lady is being allowed to feed the cats in this area and had permission from the City. This is very dangerous for those office workers who do drive and park their cars in this lot. If this had been worse, you would have been getting a call from my lawyer. As it is, I expect that you will see the potential seriousness of this, and will remove these cats from the property. I also trust that you will contact the City and this lady and make them aware of the legal repercussions of their actions.

2255 Jefferson Street, Torrance, CA 90501
Tel (310) 328-8577 • Nationwide Toll Free 1-800-544-1609 • Fax (310)328-8518
www.diversifiedimaging.net • email: orders@diversifiedimaging.net

You can call me at the office to discuss this in more detail. I do want a response from this letter and to know that you are doing what is needed to solve this matter to an appropriate conclusion. We should not have to share our parking lot with 10-20 stray cats that someone is feeding to keep them in this area.

Please take this matter seriously. Again, I expect a reply ASAP.

Thank you.

Kevin Fitzpatrick
Director of Sales and Marketing
Diversified Imaging Supply 2255 Jefferson Street
Torrance, CA 90501
310-328-8577, ext. 222

Cc: Bruce Benton
Darrell Benton

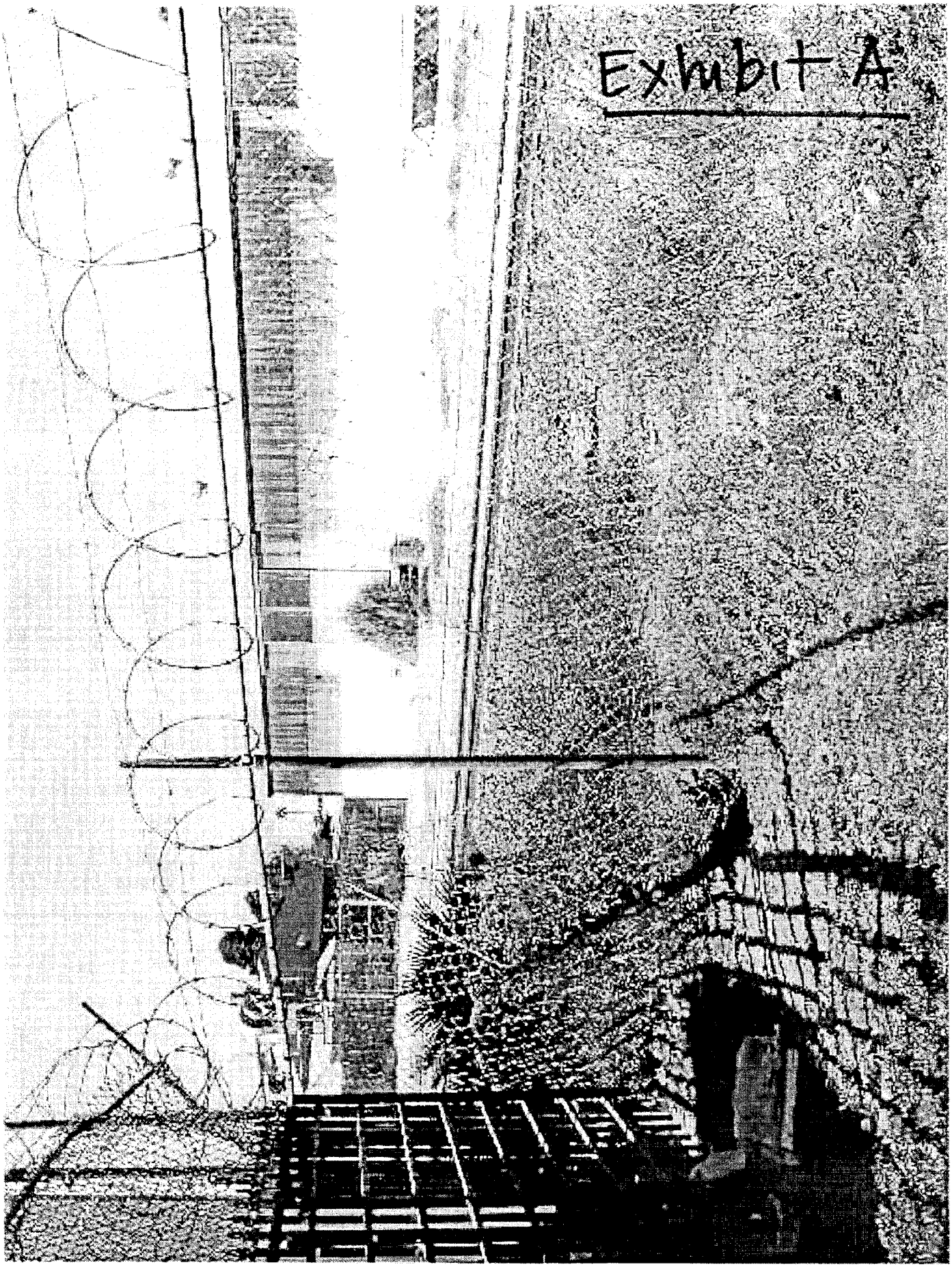
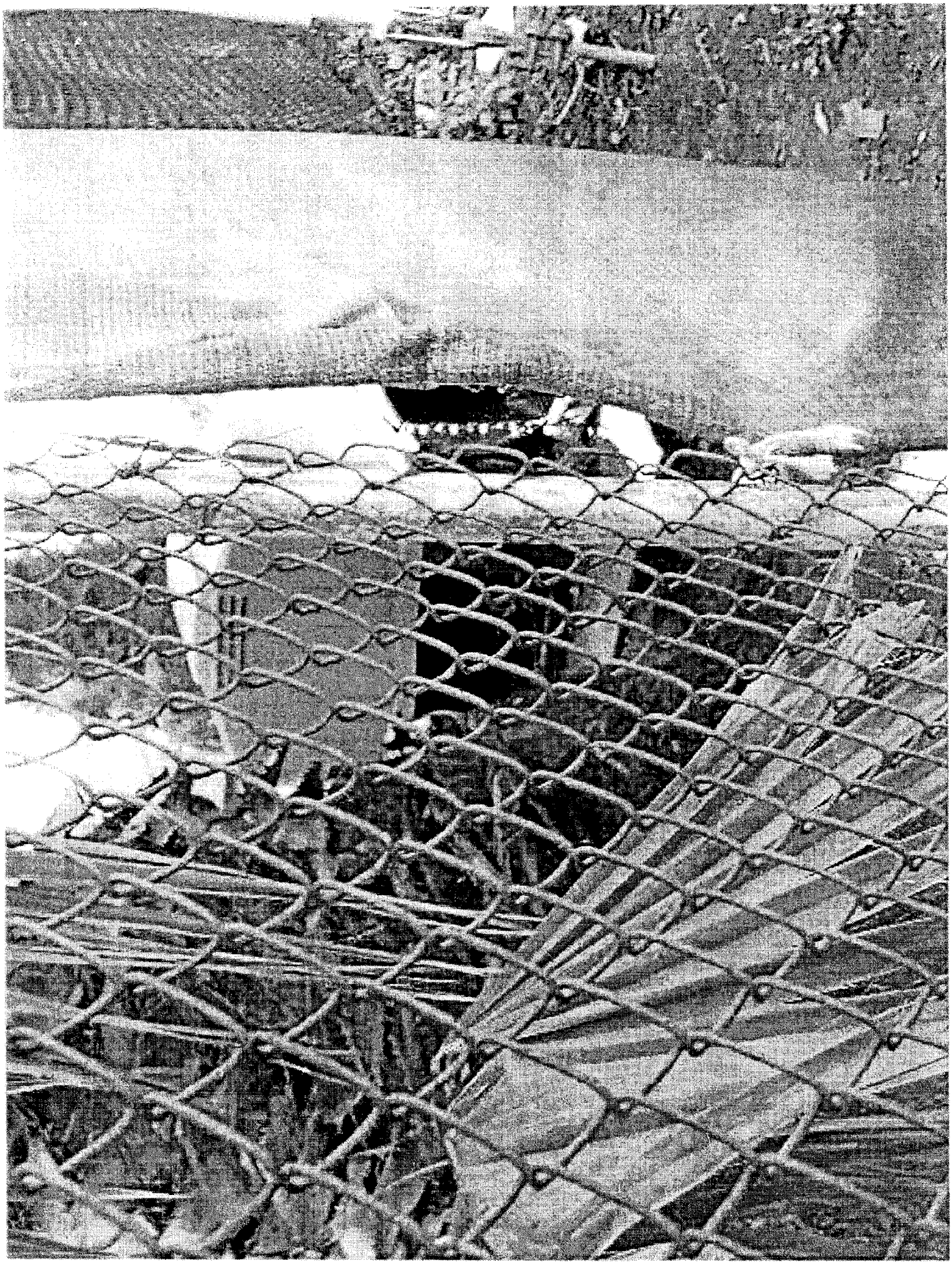
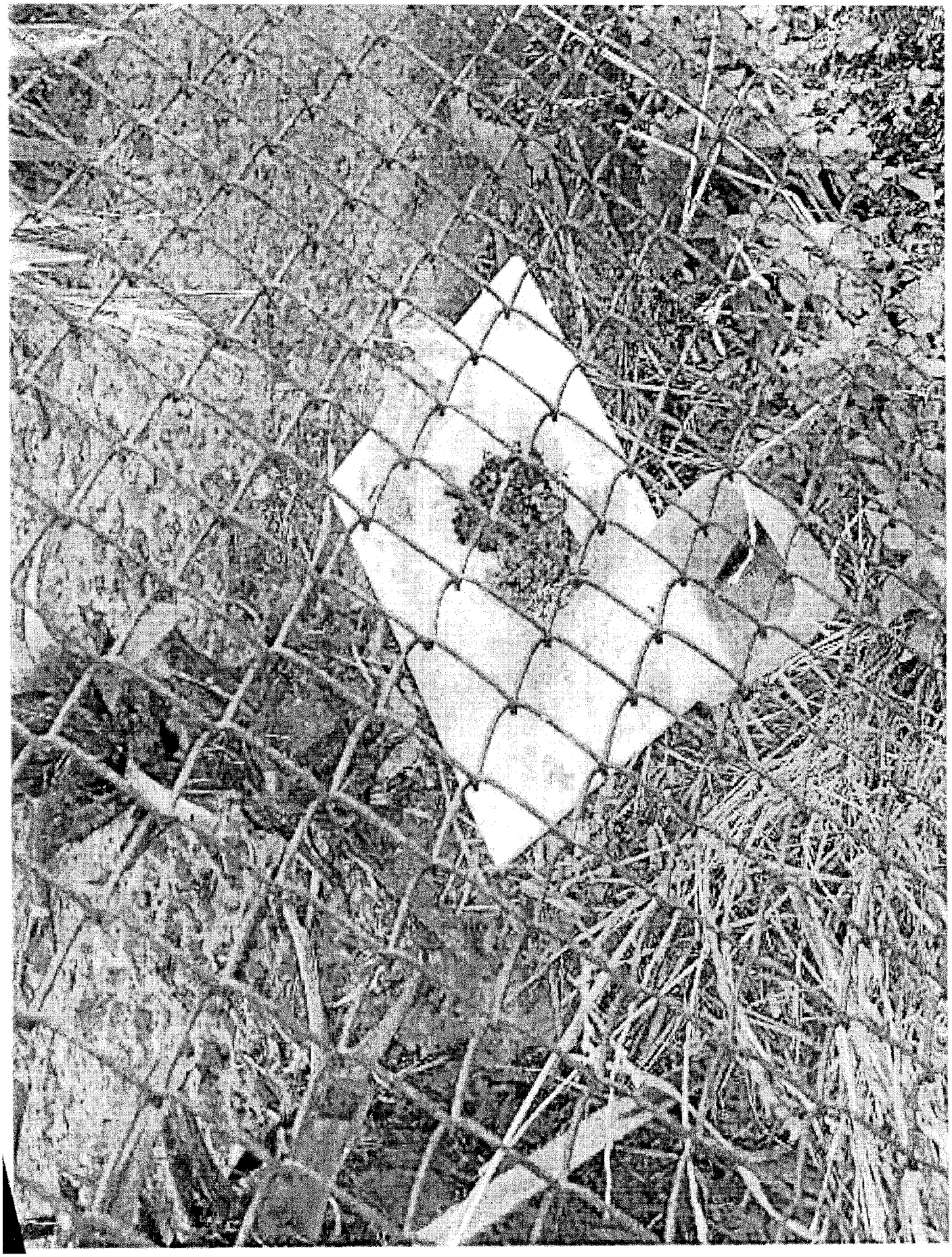


Exhibit A





ATTACHMENT #5

ATTACHMENT #5

Fur flies in debate over feral cats

Today we publish answers to our Question of the Week. This week's question: **"Torrance this month will consider a ban on feeding feral cats in the city. Is this a good way to protect public health and safety, or will it cause undue animal suffering?"**

Just what Torrance needs, another ordinance. Why punish the cats? Why not the people who dump their cats in parks and everywhere else? That would be an ordinance I would support.

I have been feeding feral cats now and then for some time and will continue to do so, ordinance or not.

— **TOM HANDSAKER,** Torrance

□□□

Let's get rid of the cats first, then let's talk.

— **JOHN BURKE,** Gardena

□□□

No, I don't agree that we should ban feral cats. Number one, they're already neutered, they're being fed and they're safe. We're avoiding the real issue, and that is the people who are irresponsible (by not) having their pets spayed or neutered or the people who are dumping the animals. That's the real problem, not the feral cats.

— **MELANIE LOLLAR,** Torrance

□□□

A lot of times when you get rid of a bunch of cats.... you find that you're overrun with rodents. I don't see that they're hurting anyone, if the ladies are feeding them, because I have cats myself, and I think it's wrong for (the city) to do that because they'll do nothing but euthanize the cats.

— **VONDELL REYNOLDS**
San Pedro

□□□

A conscientious dog owner will pick up after his pet. Who will pick up after 40-plus feral cats in a public park right next to a grammar school?

— **JAMES LEECH**
Torrance

□□□

It is a good thing to protect the feral cats. If we don't do it, we will be causing undue animal suffering. Also, it is not the animals' fault that they are there. ... (We) humans are dumping these poor cats there, and they are having to fend for themselves. They need to enforce the laws for people dumping our animals and not take it out on the poor animals. It's not their fault.

— **AUDREY McCABE**
Torrance

□□□

What has happened to compassion? Animals, in this case feral cats, did not ask to be abandoned and left on their own to fend for themselves. ... What about giving a big thank-you to those dedicated people who sacrifice their own time and money to spay, neuter, vaccinate and feed the helpless cats, who get at least one meal every day? There are so many pressing problems — war, poverty, homelessness, child abuse — so why should feeding cats be such a major cause for alarm?

Instead of a law banning cat feeding, how about a law that makes it mandatory for an individual to spay/neuter their cat before they can own one, and shouldn't we at the very least make it a law to heavily fine those abusers who are caught "dumping" innocent cats and dogs?

— **ANNA NICHOLS,** Torrance

□□□

Absolutely do not feed feral cats. They are a threat to public health.

— **PAUL W. JONES**
Lawndale

□□□

This is a deal breaker for (us) and countless other Torrance animal lovers. Any politician who supports this measure is not getting my vote. We are all outraged and embarrassed that our community is so heartless as to want to ban the feeding of poor, defenseless animals.

How about asking for the community's help to relocate the cats since developments are displacing them? How about allocating funds to help with this situation? That I do not mind paying tax dollars for. But to ban and then threaten euthanization of cats that have been living there for years — unbelievable!

As far as fleas in the area, a simple concoction of water and diatomaceous earth (which is extremely cheap and harmless to animals and people) sprayed on the grounds occasionally would greatly reduce that problem. A donation of flea treatment sprinkled into the ferals' food once a month would take care of the fleas on the cats. There are ways to work this out.

— **SUSIE PARK AND LEO LEE**
Torrance

□□□

Seems to me there are a lot of cat haters out there. If those were dogs, nobody would be doing this. Everybody complains about the cats, and they bury their feces, so I don't see where the big problem there is.

— **DOUG MARSTON**
Gardena

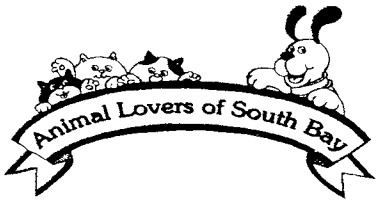
□□□

Perhaps Torrance this month should consider a ban on feeding the City Council. Or would this cause undue human suffering?

— **RITA MADIGAN,** San Pedro

☐ Los Angeles Times
☒ Daily Breeze
☐ Press-Telegram
☐ _____
Date: 12/15/06

To: ☒ Mayor & Council (7)
☐ Department Heads
☐ Executive Staff
☒ Mayor G
☒ J. Gibson
☐ GP



OFFICE OF THE
MAYOR & COUNCIL

2006 DEC 15 PM 4:57

28364 S. Western Ave., Box 359
Rancho Palos Verdes, CA 90275
310-784-7134

CITY OF TORRANCE
2006 DEC 18 PM 2:36

Torrance City Council
3031 W. Torrance Blvd.
Torrance, Ca, 90505

Dec. 13, 2006

Subject - Proposed Feral/Stray Cat Ordinance

I have read that you have a proposed Cat Ordinance that you are going to be considering. I want to tell you of the experience we have had with TNR and with volunteers doing the care. I hope this will help when you are going to make your decision.

1. Colonies that we have maintained in our areas have decreased once we take over and do TNR
2. Volunteers watch to see if any cat is ill, if so they trap it and take it to a vet to have it treated.
3. The cats are fed and they make sure there is no food left after feeding them.
4. They pooper scoop any areas that the cats may have used as a litter areas.
5. Volunteers put down medications to eliminate flea problems in areas where possible.
6. Charities are limited as to how much money they have and they are limited on being able to get enough food donated. Most of this is covered by their own money
7. If any kittens or cats are dropped off by someone, they are checked medically , spayed/neutered if not already done Then they are taken to adoption

I find that the people working in Pet Rescue and working with ferals are pretty high professionals. A great portion are retired persons. We have teachers, company executives, accountants, engineers, postal employees, and we have some who currently own businesses, and some housewives.
It takes money to do this type of work.

The problem that we are all looking at is caused by the citizens that move and leave their pets behind. It is caused by people getting kittens and when they grow up dump them. People who are not home owners - move to new apartments and cannot take their pets with them. People getting new partners and their new partners do not care for cats so kitty gets dumped. People dying and their relatives open the door and tell the cats to get out. It is caused by

people breeding so that family can experience the life cycle. The biggest cause is people not spaying and neutering their animals.

What is needed is education to teach people to spay and neuter.

Please do not stop these feeders from doing what is proper.

If you get rid of the cats - they will be replaced by rats and other animals.

The volunteers are doing the humane thing - these little souls did not ask to be thrown out like a piece of garbage. If you found a homeless person who was starving would you not feed him? Yes they all need help. Please do not turn your backs on homeless animals. Killing them is not the right thing to do.

I think you should post signs in parks and such that make it a crime to drop off an animal. Make some of these people do volunteer work at a shelter and have them look in the eyes of these unwanted animals when they are being put down.

If you are going to vote on anything - vote on appropiating some money to be spent on literature to teach all people to spay and neuter. The other alternative is to work toward a mandatory spay/neuter law for all pets.

Respectfully

Mary Kaleta Oksenkrug

Mary Kaleta Oksenkrug
President and Ceo

THE HUMANE SOCIETY OF THE UNITED STATES

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[illegible]
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Promoting the protection of all animals
2100 L Street, NW, Washington, DC 20037 • 202-452-1100 • Fax: 202-778-6132 • www.hsus.org

December 12, 2006

City of Torrance
City Hall
3031 Torrance Blvd.
Torrance, CA 90503

Dear Mayor Scotto & City Council Members:

I recently read an article, "Torrance gears up for catfight over proposed ordinance." It seems that you are considering an ordinance to ban feeding homeless cats in your community as a strategy to control their populations.

Feeding bans are generally ineffective when dealing with homeless cats because the cats don't simply go away. Attempts to starve out cats only result in continued reproduction and hungrier and unhealthier animals who are more vulnerable to disease and severe parasitic infestations. Furthermore, nothing is harder than trying to stop caring people from putting out food once they know there are cats in need. In addition, although removing the cats may provide a short-term reduction in their population, other homeless cats will move in to take advantage of the food and shelter, and you will be involved in an endless cycle of trapping and euthanizing – which will be costly financially and in terms of poor community relationships.

We support managed Trap-Neuter-Return (TNR) programs to reduce the numbers of free-roaming feral cats. Feral cats are unsocialized cats who may be one or more generations removed from a home environment and may live in a group, or colony, of similar cats. These cats and their offspring are victims of abandonment, accidental loss, and failure by owners to sterilize their pets. Lost and abandoned tame strays should be evaluated for placement in loving homes.

A reduction in the cat population will mean fewer nuisance complaints (about overpopulation, fighting, spraying, and roaming) to animal control and city officials, fewer public health risks (bites, rabies), and less predation.

For more information on TNR, please visit our website at www.hsus.org/feralcats and the website of Neighborhood Cats at www.neighborhoodcats.org. If I can be of assistance, please contact me.

Sincerely,

Nancy Peterson

Herbers, Sue

From: Scotto, Frank
Sent: Thursday, December 14, 2006 1:51 PM
To: Herbers, Sue
Subject: FW:

-----Original Message-----
From: Poblasco, Marilyn (Space Technology)
To: Scotto, Frank
Sent: 12/14/2006 7:50 AM

Dear Mayor Scotto,

I'm appalled by the proposed City Ordinance regarding the feeding of feral cats! I not only voted for you, but also campaigned for you as well. As I recall you said you would listen to the people and meets their needs. I would like you to reconsider this issue and have some compassions for the cats and the people who have been caring for them!
Thank you in advance.

Marilyn Poblasco
Torrance resident
310 782-2280

Herbers, Sue

From: Witkowsky, Hope
Sent: Sunday, December 17, 2006 11:00 PM
To: 'Sue Trapp '
Cc: Herbers, Sue
Subject: RE: Ban on Feral Cat Feeding

Dear MS. Trapp:

Thanks you so much for taking the time to send me your views on this problem.

Sincerely,
Councilwoman Hope Witkowsky

-----Original Message-----
From: Sue Trapp
To: fscotto@torrnet.com; TBrewer@torrnet.com; GDrevno@torrnet.com; pmcintyre@torrnet.com; BSutherland@torrnet.com; hwitkowsky@torrnet.com
Sent: 12/15/2006 1:39 PM
Subject: Ban on Feral Cat Feeding

Mayor, Frank Scotto, Tom Brewer, Gene Drevno, Pat McIntyre, Paul M. Nowatka,
Bill Sutherland, Hope Witkowsky.

You might want to take a look at the options when making your decisions about the cats. A sensible solution as the one in the news article below is best. When it comes time to vote, people will remember, the animals are very dear to most people.

Two years ago Torrance officials considered moving the cats at Wilson Park to a more secluded strip of land in an effort to contain the problem.
Zeitler said that proposal never came to pass.

Thank you,

Susan Trapp

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/spaces.live.com/spacesapi.aspx?wx_action=create&wx_url=/friends.aspx&mk

Herbers, Sue

From: Barnett, Gene
Sent: Monday, December 18, 2006 8:22 AM
To: Herbers, Sue
Subject: FW: ban to feed feral/stray cats

From: barbara la [mailto:barbara.lashopping@yahoo.com]
Sent: Saturday, December 16, 2006 6:43 PM
To: gbarnett@torrnet.com
Subject: ban to feed feral/stray cats

Dear Mr. Barnett,

please reconsider passing this ban, these animals are harmless and don't deserve this.
Also by approving this measure lots of our beloved pets might get caught in the traps and be seriously hurt before their owners could do somethig about it.
I don't think it is necessary, people have been feeding the strays and they should be allowed to do so without fear of breaking the law.
I hope you'll do the right thing and let these animals run free as they should be.
Thank you for your consideration.
Best,
Barbara Kelly

Do You Yahoo!?
Tired of spam? Yahoo! Mail has the best spam protection around
http://mail.yahoo.com

Herbers, Sue

From: Scotto, Frank
Sent: Wednesday, December 13, 2006 6:55 AM
To: Herbers, Sue
Subject: FW: Cat feeding ban in Torrance

-----Original Message-----
From: Erendira Cronkhite
To: Scotto, Frank
Sent: 12/12/2006 9:12 AM
Subject: Cat feeding ban in Torrance

As an animal welfare advocate for 14 years now, I implore you strike down this proposition to ban the feeding of feral and stray cats in Torrance. It is inhumane, morally and ethically wrong. TNR is the ONLY system that has worked in decreasing the feral cat population anywhere.

Feral and stray cats whose food source is taken away from them will roam the streets even more in search for food. Their potential for threatening the safety and health of people will INCREASE as they become sick and desperate from malnutrition and starvation.

Torrance has the opportunity to spearhead a much needed change in city government thinking. Rather than implement a starvation plan, why not implement a city backed TNR program? It will cost the city and taxpayers significantly less in the long run. TNR absoulutely works and is the only program that decreases the feral cat overpopulation.

Kindly,
Eri Kriteman
VP Operations
Heaven on Earth Society for Animals
www.heavenlypets.org
310-339-2157

Any questions? Get answers on any topic at www.Answers.yahoo.com. Try it now.

Herbers, Sue

From: Scotto, Frank
Sent: Tuesday, December 12, 2006 10:10 AM
To: Herbers, Sue
Subject: FW: Cats in Torrance

-----Original Message-----
From: Vicky
To: Scotto, Frank; Brewer, Tom; Drevno , Gene; McIntyre, Pat; Nowatka, Paul M.; Sutherland, Bill; Witkowsky, Hope; Barnett, Gene
Sent: 12/11/2006 9:53 PM
Subject: Cats in Torrance

Dear Mayor Scotto, Torrance City Council Members and Gene Barnett,

I do not support the proposed ordinance to ban feeding of feral or stray cats in Torrance. Cats who are used to being fed will wonder outside their usual area to find food causing problems in those areas. Leaving them to starve is not humane. I think the volunteer groups have done a wonderful job at trapping, neutering and releasing or adopting but maybe more needs to be done. The volunteers care about the cats and I would expect that they would be willing to work with the city to make everyone happier. Torrance has made progress with the addition of its own animal control offices. This ordinance would be a step backward. Volunteer efforts have saved all of us money while trapping and euthanizing would cost much more money. I would prefer to see funds used to educate residents about responsible pet ownership, including spaying and neutering their animals and to offer low cost spay and neutering.

Sincerely,

Vicky Sargent

4908 Calle Mayor
Torrance, CA 90505
HM: 310-373-9995
WK: 310-325-5885 (YMCA)

Herbers, Sue

From: Barnett, Gene
Sent: Monday, December 18, 2006 8:20 AM
To: Herbers, Sue
Subject: FW: Feral Cat feeding

From: Noranne777@aol.com [mailto:Noranne777@aol.com]
Sent: Sunday, December 17, 2006 4:38 PM
To: gbarnett@torrnet.com
Subject: Feral Cat feeding

I have heard about the ban of feeding poor homeless cats. What are you thinking? Maybe we should take the attitude of China and just beat the cats to death. We are over run with cats due to our irresponsibility for abandoning cats and not having them fixed. Why not take the position of spaying and neutering all of the unwanted cats and eventually that would take care of the problem. I am very saddened by our lack of compassion to domestic animals. I certainly hope everyone rethinks this and puts their energy in the right place. Thank you, Noranne Parente

Herbers, Sue

From: Barnett, Gene
Sent: Monday, December 18, 2006 8:22 AM
To: Herbers, Sue
Subject: FW: Feral cat feeding ban

-----Original Message-----
From: Gracia Fay Ellwood [mailto:graciafay@mac.com]
Sent: Saturday, December 16, 2006 8:17 PM
To: gbarnett@torrnet.com
Subject: Feral cat feeding ban

Dear Mr. Barnett,

I hope you will speak up against the proposed ban on feeding feral cats. This callous proposal is not the answer to ending the annoyances of mating behavior; rather trap-neuter-return, which is already being implemented by caring people, is the answer. It leaves the cat colonies to dwindle in a natural manner.

We have enough curtailing of our liberties these post-9/11 days to introduce yet another one.

Sincerely,
Gracia Fay Ellwood, Ph.D.

Herbers, Sue

From: Witkowsky, Hope
Sent: Sunday, December 17, 2006 11:04 PM
To: 'mary ramirez '
Cc: Herbers, Sue
Subject: RE: feral cat law

Dear Ms. Ramirez

Thanks you so much for taking the time to send me your views on this problem.

Sincerely,
Councilwoman Hope Witkowsky

-----Original Message-----
From: mary ramirez
To: fscotto@torrnet.com; TBrewer@torrnet.com; GDrevno@torrnet.com; pmcintyre@torrnet.com; pmnowatka@torrnet.com; BSutherland@torrnet.com; hwitkowsky@torrnet.com
Sent: 12/15/2006 8:27 PM
Subject: re: feral cat law

To all Torrance city council members,

I am thoroughly disgusted that this hearing would even be up for discussion. I have spent thousands of dollars of my own money helping feral cats in the community. Have you considered working with some rescue groups to help take care of whatever problems you feel may exist?
I know for a fact that rescue groups would help you in finding a solution to work with the community instead of starving these animals and leaving them to die. I cant believe that you would even make this a law. it is cruel and inhumane. I am not saying that feral cats are not a problem I know they can be because I have dealt with large numbers of colony's getting them spayed/neutered, shots and feeding stations. I sincerely hope you take this into account of what this could mean to these poor animals. I will continue to feed them and take care of them.
If that's a crime arrest me.

Thank you for your time,

Mary Ramirez

Herbers, Sue

From: Nowatka, Paul M.
Sent: Sunday, December 17, 2006 1:18 PM
To: Herbers, Sue
Subject: FW: feral cat law

From: mary ramirez [mailto:maryramirez2258@yahoo.com]
Sent: Friday, December 15, 2006 8:28 PM
To: Scotto, Frank; Brewer, Tom; Drevno , Gene; McIntyre, Pat; Nowatka, Paul M.; Sutherland, Bill; Witkowsky, Hope
Subject: re: feral cat law

To all Torrance city council members,

I am thoroughly disgusted that this hearing would even be up for discussion. I have spent thousands of dollars of my own money helping feral cats in the community. Have you considered working with some rescue groups to help take care of whatever problems you feel may exist? I know for a fact that rescue groups would help you in finding a solution to work with the community instead of starving these animals and leaving them to die. I cant believe that you would even make this a law. it is cruel and inhumane. I am not saying that feral cats are not a problem I know they can be because I have dealt with large numbers of colony's getting them spayed/neutered, shots and feeding stations. I sincerely hope you take this into account of what this could mean to these poor animals. I will continue to feed them and take care of them. If that's a crime arrest me.

Thank you for your time,

Mary Ramirez

--
No virus found in this incoming message.
Checked by AVG Free Edition.
Version: 7.5.432 / Virus Database: 268.15.22/590 - Release Date: 12/16/2006 5:39 PM

--
No virus found in this outgoing message.
Checked by AVG Free Edition.
Version: 7.5.432 / Virus Database: 268.15.22/590 - Release Date: 12/16/2006 5:39 PM

Herbers, Sue

From: Barnett, Gene
Sent: Monday, December 18, 2006 8:23 AM
To: Herbers, Sue
Subject: FW: Feral cats

From: Jeanine Curcione [mailto:iwngit@ca.rr.com]
Sent: Friday, December 15, 2006 7:06 PM
To: gbarnett@torrnet.com
Subject: Feral cats

I would appreciate it if you did not trap and kill the cats.
Please find an alternative. It is not their fault they are in this position. It is the fault of careless and uncaring people.
Please don't kill them. It won't stop them. They will come back, they will starve and move into neighborhoods where people live.
Liz Kurtz
L.A. Ca. 90066

Herbers, Sue

From: Scotto, Frank
Sent: Wednesday, December 13, 2006 2:39 PM
To: Herbers, Sue
Subject: FW: Feral Cats

-----Original Message-----
From: andycat3
To: Scotto, Frank
Cc: lholcombe@jolmgt.com; Brewer, Tom; Drevno , Gene; McIntyre, Pat; Nowatka, Paul M.; Sutherland, Bill; Witkowsky, Hope; s@maill.myexcel.com
Sent: 12/13/2006 2:30 PM
Subject: Feral Cats

Dear Mr. Scotto:

I am the Editor of a local magazine called Journal of Longevity and was recently sent an email informing me of your intention 1) to eliminate feral cat colonies and 2) to penalize caretakers who would continue to maintain these colonies. I am currently preparing a series of articles to run in my magazine relative to the elderly among the caretakers of feral cats - so I have been researching this subject for some time now.

Getting rid of feral cats is not in the best interests of your city. In fact, your intention strikes me as shortsighted with the potential to put your community at risk for disease. Cats are not your enemy, rats are.

The population of the Norway rat, a carrier of deadly diseases, which is alive and well in the greater Los Angeles area, will only stand to gain if cats are eliminated. A case in point: The cat population had been decimated by mankind during the Middle Ages as a result of a spreading superstition that cats were evil and instruments of the devil. The very word, evil, means to destroy. No one better fit the description of evil than the human beings who were destroying cats during that dark period in history. That decision to destroy cats had far-reaching consequences that snowballed like an avalanche into the destruction of human beings. The result: the Black Plague swept through Europe in the Middle Ages killing 25 million people. It was only when cats were allowed to thrive again, that the rat population subsided and the Black Plague ended.

Since we get an historical clue as to the role of cats in the Divine Scheme of Life -- and I trust you believe in a Creator -- to presume that you have the right to "get rid" of God's creatures, is an insult to your Maker. That you know better than God is the height of arrogance.

I would like to sit down and further discuss this issue with you. I will be giving you a call in the next few days to followup on speaking with you directly.

Sincerely,
Beverly Berwald
Editor in Chief
Journal of Longevity

Herbers, Sue

From: Scotto, Frank
Sent: Tuesday, December 12, 2006 10:11 AM
To: Herbers, Sue
Subject: FW: FERAL CATS

-----Original Message-----
From: bb0630@earthlink.net
To: Scotto, Frank
Cc: Witkowsky, Hope
Sent: 12/11/2006 4:03 PM
Subject: FERAL CATS

Mayor Scotto
Council members
Gene Barnett
Animal Control
Environmental Dept.
All associated depts.

Friday's Daily Breeze stated we have a feral cat problem and the City Council was going to address the issue.
I felt all along that the FREE RANGE cats in Torrance were getting a FREE RIDE at the expense of the tax payers and dog owners.
I have neither a dog or cat.
I strongly feel there should be a fee for owning a cat, especially the free ROAMING.
There should also be a hefty fine for feeding feral cats by anyone that's been cited for doing so.
Starting at $200.00 for the first offense.
I would consider not charging those cat owners who do not allow their cats to roam free outside of there homes in the fee.
I've had to deal with cats spraying and feces in our yard every since we bought our house in 86.
My neighbor currently feeds cats outside her back door and I've been on her case for at least ten years about it.
The people who own these cats are never around to pick up after them.
Any ordnance you can enact regarding cats would be greatly appreciated.
Wishing everyone a Merry Christmas because I don't have to be politically correct.
Sincerely,
Charles Boughton

bb0630@earthlink.net <mailto:bb0630@earthlink.net> EarthLink Revolves Around You.

Herbers, Sue

From: Barnett, Gene
Sent: Friday, December 15, 2006 1:59 PM
To: Herbers, Sue
Subject: FW: Feral Cats - Human Health and Safety Information

---

From: Salyer, Jean [mailto:jsalyer@amcastle.com]
Sent: Friday, December 15, 2006 1:07 PM
To: David Young; gbarnett@torrnet.com; fscotto@torrnet.com; tbrewer@torrnet.com; Gdrveno@torrnet.com; pmcintyre@torrnet.com; Nowatka, Paul M.; bsutherland@torrnet.com; hwitkowski@torrnet.com
Cc: Jessica Frohman; lisa_holcombe@hotmail.com; doggilama@aol.com; bill@idausa.org; bberwald@jolmgt.com; FeralCatCr@aol.com; nancycarr@hallmarkchannel.com
Subject: RE: Feral Cats - Human Health and Safety Information

Hi David,

Thank you for your very touching story about the homeless man, who despite his enormous hardships, has the charity in his heart to provide for other creatures in need. This is true generosity. I would like to make a donation to this homeless person if you will tell me how to do this. Maybe others can help out too.

Thanks,

Jean

From: David Young [mailto:davidryoung@linkline.com]
Sent: Friday, December 15, 2006 11:43 AM
To: Salyer, Jean; gbarnett@torrnet.com; fscotto@torrnet.com; tbrewer@torrnet.com; Gdrveno@torrnet.com; pmcintyre@torrnet.com; Nowatka, Paul M.; bsutherland@torrnet.com; hwitkowski@torrnet.com
Cc: Jessica Frohman; lisa_holcombe@hotmail.com; doggilama@aol.com; bill@idausa.org; bberwald@jolmgt.com; FeralCatCr@aol.com; nancycarr@hallmarkchannel.com
Subject: RE: Feral Cats - Human Health and Safety Information

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Herbers, Sue

From: Mukhim, Ribhalin
Sent: Wednesday, December 13, 2006 11:05 AM
To: Herbers, Sue
Subject: Feral Cats Comment

Ghassemi:
Comments from citizen regarding feral cats issue via Maximo:

Sent 12/8/06

From:
Maria Ghassemi
19301 Flavian Ave.
Torrance
cadore4me@aol.com

I was shocked when I read the top page article in the Daily Breeze about the City wanting to stop the feeding of feral cats. There must be a better, more humane way to deal with the problem. Starving the cats can't possibly be the best solution. I always thought that Torrance was an animal friendly City, let's not change that!

Herbers, Sue

From: Witkowsky, Hope
Sent: Friday, December 15, 2006 12:13 PM
To: 'Stacy Polk '
Cc: Herbers, Sue
Subject: RE: Feral Cats Letter to Daily Breeze

Thanks for taking the time to share your views with me.

Councilwoman Hope Witkowsky

-----Original Message-----
From: Stacy Polk
To: elysecatsinc@sbcglobal.net; fscotto@torrnet.com; TBrewer@torrnet.com; Drevno@torrnet.com; pmcintyre@torrnet.com; pmnowatka@torrnet.com; BSutherland@torrnet.com; hwitkowsky@torrnet.com; gbarnett@torrnet.com; poohspta@earthlink.net; k.a.m33 @sbcglobal.net; DBrown1888@aol.com; Minimse2@aol.com; PatriciaAcosta@earthlink.net; adoptpet@cox.net; ajohns366@yahoo.com; alison.doolin@ngc.com; amy.matthews@ngc.com; belindaberdes@yahoo.com; Bassgroupy@aol.com; bhill@commercenatbank.com; JBGrammie1 @aol.com; bperry12@sbcglobal.net; bumpsgallery@comcast.net; carolyncsquare@sbcglobal.net; cleanjust42day@msn.com; cmetropole@yahoo.com; Bettyboopcoop@aol.com; FLADARLING@aol.com; honey-bee@mailcity.com; dadinse@adelphia.net; MittensD@aol.com; fixaferalmeow@aim.com; Fred.White@ngc.com; gbambina@yahoo.com; Teresa.Gilmore@ngc.com; GSmilovitch@winston.com; jmhermansen@yahoo.com; marionjaikowski@sbcglobal.net; jasminhartmann@juno.com; jane.prather@ngc.com; joan.page@ngc.com; juliewhite4359@earthlink.net; jvargas@usc.edu; karyl.padgett@ngc.com; kay.paulino@ngc.com; Kittyaloha@aol.com; ulualoha@hotmail.com; melyssawenda@earthlink.net; Lesneff@aol.com; PreciousPawsResQ@aol.com; purrrsona@adelphia.netm; rogerd.mortimer@juno.com; shannajk@yahoo.com; Stacy_Polk@raytheon.com; trapnspay@earthlink.net; marilyn.poblasco@ngc.com; hattie90278 @yahoo.com; shannajk@yahoo.com; fastll@comcast.net; tiger1dr@charter.net; jcjxo@aol.com; hanaskids@earthlink.net; joanne@pacifictitlearchives.com; CisForCat90832@yahoo.com; strear@idtplaw.com; frannie0416@cox.net
Sent: 12/14/2006 4:39 PM
Subject: Feral Cats Letter to Daily Breeze

I recommend that all of you attend our Torrance City Council meeting this coming Tuesday night at 7:00. If this passes, it will pass in other cities as well affecting all of us.

Stacy

My Letter To The Editor of the Daily Breeze:

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~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~

In response to your article of 12/11, (Torrance Catfight Over Proposed Ordinance), Animal Control has an arrogant short-sighted attitude towards a "companion" species of animal that's being blamed for human irresponsibility! The problem isn't with cat caretakers, but with pet owners whose unneutered cats are abandoned or allowed to roam! The caretakers are simply trying to care for these cats that end up in desperate conditions in an attempt to ease their suffering.

Feral (wild) cats reduce rodent numbers who "aspire" to live in our cupboards and garages. Feral cats do not. L.A. County has a rodent problem with them carrying the Hantavirus that spreads to humans from their droppings, whereas cat diseases are not transferrable to humans and those that are rarely, if ever, do because it's too hard to make contact with them. When "neutered", cats also get rabies and FVRCP shots, and then stay close to food sources and small shelters if provided. They no longer fight, spray urine, or wander.

Feral cat caretakers' provide fresh food and water daily to help prevent foraging in neighboring dumpsters, trash cans and backyards. We remove dead carcasses from car

injuries and illnesses, medically treating those we can with no financial support. We don't stop at helping cats, but come to the aid of any animal when the need arises, which helps Animal Control.

Pet owners let their cats run amok, without spaying and neutering, or cruelly dump them like last night's leftovers. They don't get their cats the necessary shots required to keep them healthy either, leaving caretakers to do it.

I recommend that Torrance Animal Control act like the animal advocates they espouse and work WITH caretakers in an innovative and progressive manner.
Like the City of L.A., Torrance needs to pass a microchip ordinance and non-breeding ordinance that fines OWNERS who "lose" their pets or allows them to reproduce. Torrance needs to get their heads out of their.....uh.....litter boxes.....and get creative and productive. Let's talk!!

Stacy Polk,
Abandoned Cat Caretaker?
Hawthorne, CA.

Herbers, Sue

From: Barnett, Gene
Sent: Thursday, December 14, 2006 1:07 PM
To: Herbers, Sue
Subject: FW: Feral/Stray Cat Ordinance

From: Anne [mailto:anne@scottmgmt.com]
Sent: Thursday, December 14, 2006 10:28 AM
To: fscotto@TORRNET.COM; TBrewer@TORRNET.COM; GDrevno@TORRNET.COM; pmcintyre@TORRNET.COM
Cc: gbarnett@TORRNET.COM; pmnowatka@TORRNET.COM; BSutherland@TORRNET.COM; hwitkowsky@TORRNET.COM
Subject: FW: Feral/Stray Cat Ordinance

Subject: Feral/Stray Cat Ordinance

Dear Mr. Barnett,

I will not be able to attend the December 19th city council meeting, however, I would like to respond to the Proposed Feral/Stray Cat Ordinance.

I believe this ordinance is very inhumane to the animals involved.
PETA should be involved to help remedy this situation.
The problem starts with the irresponsible pet owners who dump their unwanted pets at the park & those who let their animals roam vs. keeping them indoors like responsible owners should.

Many people with warm hearts go out of their way to help these stray & abandoned animals without incurring costs to the city. These loving people devote their time, energy and money to feed these abandoned animals.

The issue should be to STOP people from dumping these cats at the park vs. penalizing the kind folks who feed them or penalizing the innocent animals involved.
I think a fine should be imposed to those who desert their animals on city property.

If the City of Torrance had a "no-kill" shelter for unwanted pets then maybe this problem would not exist or be as problematic. Other cities have "no-kill" shelters. Why doesn't Torrance?
If we do have one, nobody seems to know about it. The public should be made aware that they have options vs. discarding animals on city property.

I know that most people don't want to drop their unwanted pets at the Animal Control or Humane Society because they believe they will be euthanized immediately or shortly thereafter, with no reasonable chance to be adopted or survive. In their minds, dumping them would allow a slim chance, but a chance for survival.

The Humane Society should set up a "no-kill" policy or a separate shelter.
I am sure many residents of Torrance would gladly donate to such an institution.

Someone has to protect, care and speak on behalf of these poor animals.

It is very cruel & mean to propose such an ordinance. I believe it is cruelty to animals and isn't there laws against that?

Please reconsider and give the animals a fighting chance for survival.

Sincerely,
Anne Hauck,
Resident of Torrance 90504

Herbers, Sue

From: Barnett, Gene
Sent: Monday, December 18, 2006 8:19 AM
To: Herbers, Sue
Subject: FW: Food for Stray Animals/Compassion/Humanity

From: Nancy Love [mailto:wordartist111@yahoo.com]
Sent: Sunday, December 17, 2006 10:45 PM
To: fcotto@torrnet.com; TBrewer@torrnet.com; GDrevno@torrnet.com; pmcintyre@torrnet.com; pmnowatka@torrnet.com; BSutherland@torrnet.com; hwitkowsky@torrnet.com; Meegen.Murray@sen.ca.gov; gbarnett@torrnet.com; governor@governor.ca.gov; mayordaniel@gmail.com; senator@feinstein.senate.gov; Senator.Poochigian@sen.ca.gov; Senator.Escutia@sen.ca.gov; Senator.Dutton@sen.ca.gov; Senator.ashburn@sen.ca.gov; senator.alquist@sen.ca.gov; senator.aanestad@sen.ca.gov
Subject: Food for Stray Animals/Compassion/Humanity

RE: The upcoming decision in Torrance regarding feral cat feeding

Hello:
I am sending you this letter because I believe you will act immediately to intervene in this matter in a compassionate way. **I URGE you to do whatever you can to prevent citizens in Torrance from ending the benevolent feeding programs**.

I know of several very successful spay/neuter/release programs in LA--run by churches and private organizations--and it truly would create a lot of unnecessary suffering if they were abruptly ended.

I came to LA only two years ago, and certainly one of the things that has impressed me greatly is the extent to which Los Angeles citizens endeavor to solve our treatment of animal/humane issues with compassion. Do you realize that the new animal shelter system director is trying to make OURS the first no-kill major metropolitan shelter system in the US?

I've waited for that kind of good news for years, and to hear it from a civic leader in the town I have so recently chosen to make my own gives me new pride in my good judgment.

So this situation in Torrance is both shocking and out of character with the city as a whole. One of our most successful treatments in the humane consideration of the animals with whom we share our urban environment has been the neuter-and-release feral program.

Please do what you can do, and quickly, to intervene in this matter. You can prevent pain and suffering.

Hunger of any sort should be unnecessary on this planet. We know that. Let's show it.

Sincerely,
Nancy Love
310-395-9569
PO Box 115

Herbers, Sue

From: Drevno , Gene
Sent: Friday, December 15, 2006 3:43 PM
To: jane garrison
Cc: Herbers, Sue
Subject: RE: ordinance

-----Original Message-----
From: jane garrison [mailto:janegarrison@comcast.net]
Sent: Friday, December 15, 2006 12:41 PM
To: fcotto@torrnet.com; TBrewer@torrnet.com; GDrevno@torrnet.com; pmcintyre@torrnet.com; pmnowatka@torrnet.com; BSutherland@torrnet.com; hwitkowsky@torrnet.com; Meegen.Murray@sen.ca.gov; gbarnett@torrnet.com; governor@governor.ca.gov; mayordaniel@gmail.com; senator@feinstein.senate.gov; Senator.Poochigian@sen.ca.gov; Senator.Escutia@sen.ca.gov; Senator.Dutton@sen.ca.gov; Senator.ashburn@sen.ca.gov; senator.alquist@sen.ca.gov; senator.aanestad@sen.ca.gov
Subject: ordinance

I am a resident of the South Bay and reside at 627 S. Catalina. I urge you to not pass an ordinance to prohibit the feeding of stray animals. What is it you are trying to achieve through this ordinance? Perhaps I can find a solution to the problem you are having. I led the animal rescue in New Orleans following Hurricane Katrina and have years of experience dealing with stray animals. Please let me know if I can be of assistance.
Jane Garrison

Herbers, Sue

From: Scotto, Frank
Sent: Tuesday, December 12, 2006 10:11 AM
To: Herbers, Sue
Subject: FW: OUTRAGED!

-----Original Message-----
From: Mymimi774@aol.com
To: Scotto, Frank
Sent: 12/09/2006 5:59 AM
Subject: OUTRAGED!

Dear Mr. Mayor: My husband and I and members of our cat fancy group are OUTRAGED that Torrance is going to prohibit the feeding of feral cats!
What is suppose to happen to these cats? Are they just going to vanish into thin air? We are proposing a petition to send to your fair city against this! We wanted you to know that your bad decision is reaching far and wide on the internet..... We live in Greeley Colorado and have heard from other cities much farther east! Please step up to the plate and stop this insanity before the name of Torrance is on everyones lips!

M. Ferguson
mymimi774@aol.com

Herbers, Sue

From: Barnett, Gene
Sent: Monday, December 18, 2006 8:23 AM
To: Herbers, Sue
Subject: FW: Please don't allow them to starve the feral cats of Torrence!

-----Original Message-----
From: Antiquarian Fossils [mailto:toadhallhq@sbcglobal.net]
Sent: Friday, December 15, 2006 8:32 PM
To: governor@governor.ca.gov
Cc: fcotto@torrnet.com; TBrewer@torrnet.com; GDrevno@torrnet.com; pmcintyre@torrnet.com; pmnowatka@torrnet.com; BSutherland@torrnet.com; hwitkowsky@torrnet.com; Meegen.Murray@sen.ca.gov; gbarnett@torrnet.com; governor@governor.ca.gov; mayordaniel@gmail.com; senator@feinstein.senate.gov; Senator.Poochigian@sen.ca.gov; Senator.Escutia@sen.ca.gov; Senator.Dutton@sen.ca.gov; Senator.ashburn@sen.ca.gov; senator.alquist@sen.ca.gov; senator.aanestad@sen.ca.gov
Subject: Please don't allow them to starve the feral cats of Torrence!

You should ban BREEDERS, not the feeders of the feral cats! You will put a quick end to the people who are breeding cats when their neighbors turn them in!

How many cats are you prepared to KILL BY STARVATION? Don't you think you are merely putting a band-aid on this situation instead of getting to the core of it all by passing a law that people caught breeding will pay a fine and institute a steep fine for doing this? Believe me there will be tons of whistle blowers on these insensitive and greedy breeders, and it will then be so easy to track them down, get the funds and get these poor defenseless creatures spayed and neutered instead of inflicting even more pain and suffering..

Please reconsider

Steven Gagnon

Herbers, Sue

From: Barnett, Gene
Sent: Thursday, December 14, 2006 1:04 PM
To: Herbers, Sue
Subject: FW: Please reconsider banning feral cat feeding

From: Jake Kuramoto [mailto:jkuramot@yahoo.com]
Sent: Thursday, December 14, 2006 12:47 PM
To: jkuramot@yahoo.com
Subject: Please reconsider banning feral cat feeding

As an animal lover and active TNR volunteer, I urge you to reconsider banning the feeding of feral cat colonies on City of Torrance property. Please do not prevent the people who care for these cats from helping them.

As a taxpayer, I urge you to consider the fiscal and political ramifications of the plan.

1) The additional cost of enforcing violations in man hours outweigh the fiduciary gains of enforcement, i.e. the cost of enforcement is greater than the revenue generated by fines and the loss of revenue from enforcing the existing codes. Torrance peace offices should be keeping the community safe from dangerous felons.

2) An equivalent amount of funds added to the TNR efforts of Torrance animal shelters would produce much more effective, long-term results. Most feral cats in the areas in question have been sterilized. Unsterilized cats are introduced by pet owners who are often financially unable to afford the sterilization cost. Funding the TNR efforts of the city shelters would yield long-term results because it a) reduces the kitten population and b) encourages ownership over dumping. It is also a popular way to appeal to voters.

3) Removing the food source from a feral cat colony forces it to search for alternate food sources. Thus, adjoining neighborhoods will be overrun with cats, putting local pets in danger and frustrating the neighborhood population. This results in higher complaints, additional burden on law enforcement, and unhappy voters.

4) Trapping and removing a feral cat colony opens a vacuum which will be filled by other feral cats or by other pests like pigeons and rats. Therefore the cost of trapping and removing exceeds the benefit, which is nullified by either more cats or more rats and birds. Again, cost exceeds benefit, producing unhappy voters.

5) Trapping and euthanizing has the same effect as 5, with the added burden on the city shelters. Euthanizing animals is not free, so again, cost exceeds benefits, producing unhappy constituents and outraged animal rights groups.

Please use whatever reason you prefer to vote against this proposal. Thank you for your consideration.
Sincerely,
Jake Kuramoto

Herbers, Sue

From: Nowatka, Paul M.
Sent: Tuesday, December 12, 2006 4:41 PM
To: Herbers, Sue
Subject: FW: Phone Messages - 12/11/06

From: Werner, Margie
Sent: Monday, December 11, 2006 3:20 PM
To: Brewer, Tom; Brewer, Tom; McIntyre, Pat; McIntyre, Pat; Nowatka, Paul; Nowatka, Paul; Scotto, Frank; Sutherland, Bill; Sutherland, Bill; Witkowsky, Hope; Witkowsky, Hope
Subject: Phone Messages - 12/11/06

Roger Hernandez from LA Homeles Authority phoned so that you are aware of two meetings that will be held to discuss getting a homeless count in city limits:
Tuesday, December 12 or Wednesday, December 13 from 9:30 - 11:30 a.m. at 453 S. Spring Street, LA 90013. For further information, Mr. Hernandez can be reached at 213-225-6574.

Tina Lestelle phoned to tell you that she is against the proposed ordinance prohibiting the feeding of feral cats. Ms. Lestelle would like to talk to you about this and about abandonment of animals. Ms. Lestelle can be reached at 310-539-7890.

Margie Werner
Staff Assistant
Mayor and City Council
City of Torrance
3031 Torrance Boulevard
Torrance, CA 90503
PH: 310-618-2801
FAX: 310-618-5841
Email Address: mwerner@torrnet.com

Starting July 26, 2006, it will be mandatory to dial 1 + area code + telephone number to complete all landline calls within the 310 area code (1 is optional on cellular calls). Be sure to add the 310 area code to all pre-programmed devices and printed materials. For more information, visit www.cpuc.ca .gov.

Everyone is raving about the all-new Yahoo! Mail beta.

Herbers, Sue

From: Barnett, Gene
Sent: Tuesday, December 12, 2006 11:36 AM
To: Herbers, Sue
Subject: FW: Proposed Ban on Feeding Feral/Stray Cats in Torrance

From: mrich1118@aol.com [mailto:mrich1118@aol.com]
Sent: Tuesday, December 12, 2006 10:55 AM
To: fscotto@torrnet.com; TBrewer@torrnet.com; GDrevno@torrnet.com; pmcintyre@torrnet.com; pmnowatka@torrnet.com; BSutherland@torrnet.com; hwitkowsky@torrnet.com; gbarnett@torrnet.com
Subject: Proposed Ban on Feeding Feral/Stray Cats in Torrance

I write to you concerning the proposed ordinance against feral/stray cats. Through no intention of their own, but rather, through human negligence, these are adults and kittens without safe homes who have come to depend on the kind commitment of humans. An ordinance that bans caring for these animals represents utter condonement of negligence and ignorance. I ask you to ask yourselves **what exactly** will happen to these animals if a ban on feeding (caring) is passed?

There exists a technique called Trap-Neuter-Return (TNR). If the City were to commit to TNR rather than Eradication, it would demonstrate how powerful are the forces of generosity and ingenuity.

Thank you very much for your time and consideration,

Marcie Rich
West Los Angeles Trap Depot Operator
Feral Cat Alliance
Los Angeles, CA

I believe it is the lesson of the feral cat experience not to squelch the generous instinct we humans possess, but to take full responsibility for our behavior and to be guided by generosity.

Check out the new AOL. Most comprehensive set of free safety and security tools, free access to millions of high-quality videos from across the web, free AOL Mail and more.

Herbers, Sue

From: Scotto, Frank
Sent: Tuesday, December 12, 2006 10:11 AM
To: Herbers, Sue
Subject: FW: Proposed Ban on Feral Cat Feeding

-----Original Message-----
From: Salyer, Jean
To: Barnett, Gene; Scotto, Frank; Brewer, Tom; Gdrveno@torrnet.com; McIntyre, Pat; Nowatka, Paul M.; Sutherland, Bill; hwitkowski@torrnet.com
Cc: lisa_holcombe@hotmail.com; doggilama@aol.com; alleycatallies@alleycat.org
Sent: 12/11/2006 5:18 PM
Subject: Proposed Ban on Feral Cat Feeding

I learned that the City of Torrance is considering a ban on feeding feral cats and I would like to offer my comments on this proposal:

Leaving cats with no source of food or water is an act of cruelty. Hunger and thirst drive these helpless creatures into taking risks in a desperate search for food and shelter; they cross busy streets and are run over by cars; they become weak and are attacked by other animals and cruel humans; they are more susceptible to illness.

I am at a loss to understand why feral cats are considered a threat to human health and safety. This bit of folklore is unsubstantiated by any scientific evidence. Feral cats do not attack people; feral cats do not transmit disease except in exceedingly rare cases such as toxoplasmosis. This condition is easily avoided by refraining from ingesting feline fecal matter. The real reason for a ban on feeding feral cats is that there are people who hate cats for no particular reason. These innocent creatures cannot speak for themselves and make an easy target for anyone who wants an outlet for their hatred.

When one considers the real threats to human health and safety-- crime, auto accidents, work accidents, war, human-to-human disease transmittal, environmental health threats, alcohol, drugs and tobacco--the risk from feral cats is infinitesimal.

I would ask the person(s) who are calling for a ban on feral cat feeding to consider that when we live in urban areas we need to develop a degree of tolerance and acceptance of situations that may not please us, Stop picking on cats. They are where they are only because someone at some time breached his/her responsibility to care for them.

I urge that the city officials of Torrance take a strong stand in favor of feral cats and the people who care for them. Instead of a ban on feral cat feeding why not look for humane and progressive alternatives?
Financial aid to feral cat caregivers would go a long way toward helping spay/neuter efforts. How about establishing a safe location on some vacant city property? Or, at the very least, leave the cats alone and let their generous and selfless caregivers provide for the welfare of these unfortunate animals.

In closing I ask that each of you reflect for a moment on the worst experiences of your own lives: perhaps it was physical or emotional pain or a loss of someone or something very important to you. Know that great suffering is in store for these animals if a ban on feral cat feeding is imposed. Please don't let this happen to them. They did nothing to deserve it.

Sincerely,

Jean Salyer

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Herbers, Sue

From: Scotto, Frank
Sent: Tuesday, December 12, 2006 10:10 AM
To: Herbers, Sue
Subject: FW: proposed cat ordinance

-----Original Message-----
From: Danny Rodriguez
To: Barnett, Gene; Scotto, Frank; Brewer, Tom; Drevno , Gene; McIntyre, Pat; Nowatka, Paul M.; Sutherland, Bill; Witkowsky, Hope
Sent: 12/12/2006 6:35 AM
Subject: proposed cat ordinance

There has been great efforts on the part of tax paying private citizens like myself to spay and neuter the stray cats.

These cats are healthy because of the efforts of such groups like TLC adoptions. I know in my area, TLC adoptions have been instrumental in helping me trap, spay and keep these animals healthy. The cat population is under control in my area due to our combined efforts.

When I moved into my house 5 years ago, I had no idea that there was such huge number of stray cats. But, now the numbers had been drastically cut down. We have worked very hard to cut down on the numbers of kittens born. These animals are healthy and not spreading diseases.

I feel very bad that such efforts are being made by the City of Torrance to destroy these gentle creatures. I believe your efforts and my tax dollar are better utilized in repairing and maintaining the schools. My daughter attends Torrance High and I am appalled at the condition of the restrooms in the main gym. Now that is what gets my attention... not destroying cats that have been cared for by local cat adoption agencies and private citizens.

Please reconsider this.. I feel this would be barbaric and inhuman. I will be attending this meeting with the hopes of getting rid of this ordinance.

A very concerned tax-paying citizen,

Deborah J. Rodriguez
1734 Watson Ave
Torrance, cA 90501

Herbers, Sue

From: Scotto, Frank
Sent: Wednesday, December 13, 2006 6:55 AM
To: Herbers, Sue
Subject: FW: Proposed Feral/Stray Cat Ordinance

-----Original Message-----
From: JonsMary1@aol.com
To: Scotto, Frank
Cc: letters@dailybreeze.com
Sent: 12/12/2006 8:06 PM
Subject: Proposed Feral/Stray Cat Ordinance

Dear Mayor Scotto and Council Members;

I am writing in response to the proposal that is set to be discussed concerning the Feral/Stray Cats. I do not usually write on issues, but because of the topic and out of respect for a friend, that has worked very hard on making sure that the Stray Cats that encompass the area around her home are caught, seen by a vet and then spayed, I felt the need to forward a concerned letter to all of you.

The cat my family currently has is an offspring from a mother Feral cat that was hanging out near my friends home, across from Torrance High School. When the kittens were old enough to be taken away from their mother, she took them to a vet, had them checked out, caught the mother and had her spayed, and then placed the kittens in loving homes, such as ours. I don't know what our lives would be like if we didn't have him in our family. My friend has gone on to take the same steps and has lowered the number of cats in the area where she lives. She, on her own, has fed them, captured them when they have been sick or has taken care of them as best she could, captured young, new ones and had them spayed as well.

Not only near her home, but at Wilson Park as well, I have noticed the number of Cats have dropped considerably since citizens, that care about these animals, have taken it upon themselves to feed, nurture and care for them. They do so without asking for any help, without preaching to anyone. They pay for services when they aren't provided on a volunteer basis, and they pay for food out of their own pockets.

With all the issues that Torrance as a City faces, this isn't one that should be at the "top" of the agenda. How about our schools? Just because a measure hasn't been past, why aren't the school provided some extra TLC, instead of the money going towards hiring additional personnel or even the cost of taking care of the problem of stray and feral cats.

We have classrooms that present a health risk because they are so old, paint is peeling, or the students are forced to be in bungalows. What about Hull Middle School? What about Torrance High School? How about Fern Elementary? The 4th and 5th graders at this school have their recess in an unsecured area. They play on the large green field infront of their "classrooms", without a fence around them. A couple of years ago the concern of no fence was escalated after a person with a mental condition, threatened children at a preschool, behind the bunglaows at Greenwood Park, where the Fern 4th and 5th graders are at. This same person, was confronted numerous times by the Police Department, for yelling and threatening the students from Fern at that site during their recess and PE time.

With all the issues that need to be addressed, you must agree that the current situation with the cats is in no way a 'priority' or a true 'threat'. I would love to open the Daily Breeze and see that the council has begun the process of refurbishing the schools, not that we are having a 'meeting' to discuss cats. There goes some more wasted time and money. I know your time is as precious as everyone else's, so I ask that you redirect the emphasis on what to do with some cats and maybe put the energy and money into our future; the great kids of the

award winning, Torrance Unified School District!!

Thank you, in advance, for taking the time to read my letter. I hope that it has made a difference.

Cordially,

Mary Gomez
(Born and raised in Torrance and continuing the tradition with my children!!) Torrance

Herbers, Sue

From: Witkowsky, Hope
Sent: Friday, December 15, 2006 12:19 PM
To: 'Julia Conrow '
Cc: Herbers, Sue
Subject: RE: Proposed ordinance to ban the feeding of feral/stray cats

Thanks for taking the time to share your views with me.

Councilwoman Hope Witkowsky

-----Original Message-----
From: Julia Conrow
To: hwitkowsky@torrnet.com
Sent: 12/14/2006 6:56 PM
Subject: Proposed ordinance to ban the feeding of feral/stray cats

Dear Ms. Witkowsky,

I would like to voice my opposition to the proposed ordinance to ban the

feeding of any feral/stray cat in the city of Torrance.

I am a Torrance resident and have been providing food and water to feral

cats for the past 4 years. These cats have been maintained with a TNR (Trap, Neuter, Return/Adopted out) program so, rather than proliferating, the population has actually declined.

After consulting with fellow animal lovers and feral cat caretakers, I have come to the conclusion that the proposed ordinance would not only be inhumane, but also seems unlikely to accomplish the goals it intends to achieve.

Thank you for your time and consideration of this matter.

Sincerely,
Julia Honda Conrow

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http://clk.atdmt.com/MRT/go/aub0050001581mrt/direct/01/

Herbers, Sue

From: Barnett, Gene
Sent: Friday, December 15, 2006 2:07 PM
To: Herbers, Sue
Subject: FW: PS..READ THIS..... URGENT! READ! Ban on Feral Cat Feeding scheduled-Torrance CA-PLEASE HELP!

From: rayofjoy@aol.com [mailto:rayofjoy@aol.com]
Sent: Friday, December 15, 2006 11:23 AM
To: rayofjoy@aol.com
Cc: fcotto@torrnet.com; TBrewer@torrnet.com; GDrevno@torrnet.com; pmcintyre@torrnet.com; pmnowatka@torrnet.com; BSutherland@torrnet.com; hwitkowsky@torrnet.com; Meegen.Murray@sen.ca.gov; gbarnett@torrnet.com; governor@governor.ca.gov; mayordaniel@gmail.com; senator@feinstein.senate.gov; Senator.Poochigian@sen.ca.gov; Senator.Escutia@sen.ca.gov; Senator.Dutton@sen.ca.gov; Senator.ashburn@sen.ca.gov; senator.alquist@sen.ca.gov; senator.aanestad@sen.ca.gov
Subject: PS..READ THIS..... URGENT! READ! Ban on Feral Cat Feeding scheduled-Torrance CA-PLEASE HELP!

I forgot to give you the statistics as to the amount of feral cats you will be starving to death:

One female cat and her mate; by producing just 2.8 surviving kittens will have:
in 1 year 12 cats
in 2 years 67 cats
in 3 years 376 cats
in 4 years 2,107 cats
in 5 years 11,801 cats
in 6 years 66,088 cats
in 7 years 370,092 cats
in 8 years 2,072.514 cats
in 9 years 11,606.077 cats

How many cats are you prepared to KILL BY STARVATION? Don't you think you are merely putting a band-aid on this situation instead of getting to the core of it all by passing a law that people caught breeding will pay a fine and institute a steep fine for doing this? Believe me there will be tons of whistle blowers on these insensitive and greedy breeders, and it will then be so easy to track them down, get the funds and get these poor defenseless creatures spayed and neutered instead of inflicting even more pain and suffering..

Please reconsider!

Joy Ray
RAYning Catts 'N Doggs

-----Original Message-----
From: rayofjoy@aol.com
To: Rayofjoy@aol.com

Cc: fcotto@torrnet.com; TBrewer@torrnet.com; GDrevno@torrnet.com; pmcintyre@torrnet.com; pmnowatka@torrnet.com; BSutherland@torrnet.com; hwitkowsky@torrnet.com; Meegen.Murray@sen.ca.gov; gbarnett@torrnet.com; governor@governor.ca.gov; mayordaniel@gmail.com; senator@feinstein.senate.gov; Senator.Poochigian@sen.ca.gov; Senator.Escutia@sen.ca.gov; Senator.Dutton@sen.ca.gov; Senator.ashburn@sen.ca.gov; senator.alquist@sen.ca.gov; senator.aanestad@sen.ca.gov
Sent: Fri, 15 Dec 2006 11:06 AM
Subject: URGENT! READ! Ban on Feral Cat Feeding scheduled-Torrance CA-PLEASE HELP!

To All you Officials,
I write you this on behalf of the hundreds of thousands of Animal Activists in California and plead with you not to even consider this extremely inhumane ordinance to ban the feeding of God's precious creatures! Isn't there enough harm that has come to them already because of man's total disregard and inhumanity? Wouldn't it be far better to create a policy to get ALL the dogs and cats spayed and neutered, and FINE the people who selfishly breed for greed? The funds collected could be used to install such a spay and neuter program, thus prevent the birth of unwanted dogs and cats instead of contributing even more to their misery by starvation. Haven't they suffered by the hands of insensitive individuals enough already?

I beg you on behalf of hundreds of thousands of other concerned citizens to put an end to this unconscionable ordinance.

Joy Ray, RAYning Catts N Doggs

-----Original Message-----
From: dogfishdonna@earthlink.net
To: dogfishdonna@earthlink.net
Sent: Fri, 15 Dec 2006 10:43 AM
Subject: Ban on Feral Cat Feeding scheduled-Torrance CA-PLEASE HELP!

*** Together we can turn the tide! We really can live side - by - side with animals (domestic and wild), I don't know about you but I do it every day. I'm sure the Mayor of Torrance can be shown how to find a way!

On December 19, 2006, a proposed city ordinance to **ban the feeding of any feral/stray cat in the city of Torrance** is scheduled for the city council's consideration. **This will affect every feral/stray cat currently being fed**, including the cats that are maintained with a TNR (trap, neuter, return/adopted out) program, on any land owned by the city of Torrance.
If passed, it will also pave the way for other cities to follow suit.

This will potentially put any outdoor cat – owned or not – at risk.

The agenda of city council meetings are subject to change up until two days prior to the meeting. Please check this link and go to the date of December 19th and then go to the "Hearings" section to see if this proposal is on the agenda for that day:
http://www.ci.torrance.ca.us/11942.htm

Your attendance and support at this meeting will be crucial to the outcome of this proposed ordinance, as will your letters/emails sent to the officials listed at the bottom of this page prior to the meeting.

Please remember that in any form of correspondence, our voices will be heard much clearer if the dialogue is delivered in a polite and succinct manner.

Some of you may have seen the recent Daily Breeze article (Friday Dec. 9, 2006) covering this proposed ordinance.
http://www.dailybreeze.com/news/articles/4862741.html?showAll=y&c=y

Please note the following quote from Community Services Director Gene Barnett taken from the Daily Breeze article which shows that the consequences of the passage of this ordinance do not appear to be well-thought out.
"Our long-term intention is certainly not to euthanize, but our long-term intention is to ensure we have the public's health and safety as a priority and we somehow get

under control the abundance of feral cats that populate that park and the surrounding area," he said. "What mechanisms are undertaken to do that I couldn't tell you."
As the article points, the city of Torrance is looking to pass an ordinance to make it unlawful to feed feral/stray cats. Our question to the city officials is "what do you now expect these animals to do?"
Common sense dictates that one of three inhumane scenarios will result from the passing of this ordinance:
1) The cats will simply starve to death.
2) The hungry and bewildered/frightened cats will start migrating from their known and controlled environment to other neighboring areas, roaming the streets looking for food with the result that many will be hit by cars or encounter other perils in their quest for survival. (Keep in mind that the majority of these cats have already been trapped (TNR'd) and will most likely not re-enter a trap. They will then start to search for a source of food.)
3) City employees or pest exterminators will trap them for the purpose of euthanasia which will be extremely costly to the taxpayer.
As stated above, most of the colonies targeted for these potential fates have been managed with an aggressive TNR program. A great deal of private funding and donated time has been - and continues to be -spent on colony maintenance.
Also bear in mind that if the city decides to start trapping and euthanizing these feral/stray cats, many owned pets will be caught in the round-up resulting in their death if their owners do not find them at the county shelter in time.
We thank you for your support and appreciate your time taken to contact the city officials.

Mary Zeitler, President TLC Adoptions, Inc.
PO Box 1538
Torrance, CA 90505
(310) 373-1585

Debra Corwin, President Purrfect Partners, Inc.
PO Box 168
Redondo Beach, CA 90277
(310) 370-0526

Contact information for city officials is as follows:

Community Services Director:

Gene Barnett
gbarnett@torrnet.com
(310) 618-2939
Fax (310) 781-7502

Torrance city council members:

Mayor, Frank Scotto, fscotto@torrnet.com

Tom Brewer, TBrewer@torrnet.com

Gene Drevno, GDrevno@torrnet.com

Pat McIntyre, pmcintyre@torrnet.com

Paul M. Nowatka, pmnowatka@torrnet.com

Bill Sutherland, BSutherland@torrnet.com

Hope Witkowsky, hwitkowsky@torrnet.com

Torrance Animal Control:

Patrick Wren
(310) 618-3850

Thank you so much!

RE: Ban on Feral Cat Feeding - Proposed Ordinance for Torrance, California

From Jo of www.PurrfectPartners.com

"Hi David, Thanks for sending these e-mails regarding the Feral Cat feeding ban. Word from Debra as of yesterday is that the Mayor wants the cats removed, period, end of story. They don't seem to be getting anywhere with this. It is bad news, because Debra says once Torrance adopts this ordinance, the other neiboring cities will follow. It is going to affect so many cats. It so sad." --- Jo

The other issue for us caretakers is we will either have to comply OR face fines and being arrested for trespassing (which they said they will enforce) that of course puts our own pets and fosters in jeopardy. So we will be forced to comply and watch the suffering. As caretakers, even though we never get to hold them and pet them, we still watch their playfulness, we have a bond and now we will have to be party to this betrayal. Our only hope is that there is enough public outcry and bad press for the Mayor that he is forced to surrender. -- David

I spoke to our district office about this and forwarded this information to the Senator and Assemblymember that has Torrance in their district. Thanks for this information and I hope to hear that Torrance does NOT adopt this awful ordinance. Thank you.

Meegen Murray
Legislative Assistant
Senator Alan Lowenthal, District 27
Ph: 916-651-4027
Fax: 916-327-9113

Meegen.Murray@sen.ca.gov

My friend sent this to me about an effort by the city of Torrance, California to make feeding feral cats illegal. This is a huge step backward. In the attachment you'll find key people within the city to contact. If you have a moment please let them know this is WRONG. If Torrance is able to pass such an ordinance, I believe other cities like Long Beach will follow suit. The local paper is the Daily Breeze.

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Herbers, Sue

From: Nowatka, Paul M.
Sent: Tuesday, December 12, 2006 4:32 PM
To: Herbers, Sue
Subject: FW: Request for Meeting - Debra Corwin

From: Werner, Margie
Sent: Tuesday, December 12, 2006 8:40 AM
To: Brewer, Tom; Brewer, Tom; McIntyre, Pat; McIntyre, Pat; Nowatka, Paul; Nowatka, Paul; Scotto, Frank; Sutherland, Bill; Sutherland, Bill; Witkowsky, Hope; Witkowsky, Hope
Subject: Request for Meeting - Debra Corwin

Debra Corwin of non-profit Purrfect Partners, and Mary Zitler of TLC, would like to meet with the Council prior to the 12/19 meeting to discuss alternate solutions for the feral cats at Wilson Park. Dates and times available?

Margie Werner
Staff Assistant
Mayor and City Council
City of Torrance
3031 Torrance Boulevard
Torrance, CA 90503
PH: 310-618-2801
FAX: 310-618-5841
Email Address: mwerner@torrnet.com

Starting July 26, 2006, it will be mandatory to dial 1 + area code + telephone number to complete all landline calls within the 310 area code (1 is optional on cellular calls). Be sure to add the 310 area code to all pre-programmed devices and printed materials. For more information, visit www.cpuc.ca .gov.

Herbers, Sue

From: Scotto, Frank
Sent: Wednesday, December 13, 2006 2:39 PM
To: Herbers, Sue
Subject: FW: the torrance feral cats

-----Original Message-----
From: Elyse Mayberry
To: Barnett, Gene
Cc: Scotto, Frank
Sent: 12/13/2006 1:42 PM
Subject: the torrance feral cats

You probably don 't "care" that the feeders of the ferals have been "caretakers" of the abandoned cats in Torrance. Cats that your own tax-paying citizens have failed to spay or neuter and then simply abandoned by choice or just moved away.
You should, however, CARE that Torrance, as well as all of Los Angeles, has a very SERIOUS RAT PROBLEM .
These cats, the very ones you , in your ignorance intend to destroy, are the unpaid Legal Workers in your commun ity. They aren 't just standing around looking for a handout,they are busy protecting your residents from the fatal HANTA VIRUS!
Check with the Center for Disease Control, who sent out warnings several years ago, and had even the Health department of Los Angeles recommend keeping a cat on the premises.
The rat is the culprit. It has been called THE LAPDOG OF THE DEVIL. iT SURVIVED THE ATOMIC BLAST OF THE PACIFIC. drop it out of a 10 story building an d it will leap up and scamper away. In a toilet? It will swim for 3 days and still survive.
Poisons for rats kill birds and pets. But the cat knows his job an d does it. They won't eat the rat because they kniow it is a filthy creature.
So if you kill these cats, and the rats move in , your gardeners with their blowers will turn the droppings in to dust and you who inhale that dust will DIE!
lOOK UP AT THE TELEPHONE WIRES AT NIGHT. See them scampering along and in to your buildings???
On a personal level, I worked at Warner Brothers when previous management thought just like Torrance. Kill. Stop feeding. We became an underground movement.
Then wardrobe
complained to new management that their costumes were being destroyed.
The grips called
management that their camera cables were being chewed, Top executives were horrified to find their goodie cabinets were being trashed by cats.
Warner management called us for help. Special feeding stations were sanctioned. Caretakers were no longer afraid of losing their jobs.
Warner management now reimburses us for our efforts in stabilizing the feral cat colony.
I hope this helps you all to come to the right and proper decision on the Torrance feral cats. Your reward will be a safer community and no lawsuits from families whose children have suffered severe rat bites.

Herbers, Sue

From: Barnett, Gene
Sent: Monday, December 18, 2006 8:27 AM
To: Herbers, Sue
Subject: FW: Torrance city council members Ban on feeding cats

From: NEMESIS1IM@aol.com [mailto:NEMESIS1IM@aol.com]
Sent: Friday, December 15, 2006 4:04 PM
To: gbarnett@torrnet.com; fscotto@torrnet.com; TBrewer@torrnet.com; GDrevno@torrnet.com; pmcintyre@torrnet.com; pmnowatka@torrnet.com; BSutherland@torrnet.com; hwitkowsky@torrnet.com
Subject: Torrance city council members Ban on feeding cats

To the Mayor and the members of the Torrance City Council:

I am writing to express my strong objections to the proposed ordinance to ban feeding of feral cats in the city of Torrance. I have been dealing with feral cat colonies for over twenty years and provide you with some current information. I hope it will help you make and effective and humane choice.

I understand that the move to ban feeding of feral cats stems from problems with a particular colony in one of the city's parks. I sympathize with the position that stray cat populations need to be managed and controlled, however the mistaken notion that a ban on feeding will solve the problem is inhumane to say the least and not at all correct.

The U.S. currently has a population of about sixty to one-hundred million feral cats and the shelters and animal control facilities are killing approximately six million domestic cats each year. These three facts add up to a very large over population problem. Some communities have imposed strict laws covering licensing and breeding of all pets. Some communities have done mass euthanasia, just find that in a short period, they have the same problem again within the next year. New cats will move into the area.

TNR,(trap neuter and release),

The only humane way of dealing with the problem of feral cat over population is to establish Trap, neuter/spay, release programs (TNR). Non-lethal control is accepted by many well-respected institutions and organizations including the American Veterinary Medical Association, Cornell, and Tufts University veterinary schools, and the Doris Day Animal League. England and Denmark started much of the work in this field in the early 1970s and where the organization Cat Action Trust established extensive spay/neuter services for caretakers. Other countries, including South Africa and Australia, have been using the trap-neuter-return (TNR) control method for many years. TNR has been implemented successfully time and again in cities throughout the US. In case you are not aware there is a large drive within the US to become "No Kill", cities. Many cities in CA are trying to do this now.

It is my understand that many of the ferals cat in Torrance parks are in managed colonies. Managed colonies allow the cats to be feed, spay or neutered to prevent more cats, cared for and live out their lives. Colony caretakers are devoted individuals who spend countless hours and their own money to feed and alter these cats. They are responsible citizens who go out of their way to deal with the problem of cat over population.Keep in mind they are not lawbreakers, but are providing a public service by controlling and managing animal populations and by reducing the burden on our overtaxed public shelters.

This ordinance would create more problems than it will solve. What will the city do with the cats if no one is

allowed to feed them? Allow them to starve on the street? "Torrance the city that banned the feeding of stray and feral cats an allowed hundreds of them to die of starvation", not very good publicity. Will the city trap the animals and euthanize them? Will the city workers trapping these cats be able to tell if the cat is a stray or a feral or if the cat happens to someone's beloved pet? No they will not. As any cat domesticated house pet or feral can freak out when trapped.And what will that cost the tax payers?

You may recall several years ago Boeing in Long Beach wanted to trap and destroy over 350 cats that were living at their facility. The out cry from the public was profound enough that other humane options were found to deal with the cats.

An ordinance against the abandonment of animals, would serve the city far more than the one in question. As would lost cost spay and neuter clinics that are sponsored by the city. Educate the public for the need to spay and neuter their animals. One must take into account that it is not the cat's fault for feline overpopulation. The fault lies with humans, the irresponsible owners, people that want their children to witness the miracle of birth, the ones that think it's natures way, back yard breeders, and those who simply abandon their animals when they are longer wanted or have a problem. If you want to stop the animal over population problem start there, not by killing cats that have no other choice but to live in colonies on the streets.

S. Dani Simao
Community Manager
Gardena, CA
310-329-4007

Herbers, Sue

From: Nowatka, Paul M.
Sent: Sunday, December 17, 2006 1:20 PM
To: Herbers, Sue
Subject: FW: Torrance feral cat ordinance

-----Original Message-----
From: lauren laster [mailto:fastll@ca.rr.com]
Sent: Friday, December 15, 2006 5:27 PM
To: Ron Corcillo; Nowatka, Paul M.
Subject: Re: Torrance feral cat ordinance

.....there will ALWAYS be cats around...the choice is to have them "managed" or "unmanaged"
On Dec 15, 2006, at 2:09 PM, corcillo@earthlink.net wrote:

> Lauren -
>
> I received this e-mail from council member Paul Nowatka.
>
> -----Forwarded Message-----
>> From: "Nowatka, Paul M." <PMNowatka@TORRNET.COM>
>> Sent: Dec 14, 2006 11:20 PM
>> To: corcillo@earthlink.net
>> Subject: RE: Torrance feral cat ordinance
>>
>> We are tasking another look at this issue. We won't do anything this
>> year.
>>
>> Paul
>>
>> Mayor Pro Tem
>> Paul M. Nowatka
>> City of Torrance
>> 310-618-2801
>> pmnowatka@torrnet.com
>>
>>
>> -----Original Message-----
>> From: corcillo@earthlink.net [mailto:corcillo@earthlink.net]
>> Sent: Thursday, December 14, 2006 2:56 PM
>> To: Drevno , Gene; Scotto, Frank; Brewer, Tom; McIntyre, Pat;
>> Nowatka, Paul M.; Sutherland, Bill; Witkowsky, Hope
>> Subject: Torrance feral cat ordinance
>>
>> To the Mayor and the members of the City Council:
>>
>> I am writing to express my strong objections to the proposed
>> ordinance to ban feeding of feral cats in the city of Torrance.
>>
>> I understand that the move to ban feeding of feral cats stems from
>> problems with a particular colony in one of the city's parks. While
>> I sympathize with the position that stray cat populations need to be
>> managed and controlled, the notion that a ban on feeding will solve
>> the problem is severely flawed. The proposed ordinance not only is
>> cruel and inhumane, but also will needlessly punish numerous
>> responsible caretakers, as well as dozens of innocent, well-behaved,
>> and socially beneficial animals. In addition, it stands in direct
>> conflict with existing laws that mandate that citizens must assist
>> animals in distress, and as a result would probably not withstand a
>> legal challenge.

>>
>> This ordinance would create more problems than it will solve. What
>> will the city do with the cats if no one is allowed to feed them?
>> Allow them to starve on the street? Such a response would amount to
>> nothing less than animal cruelty and would be in direct violation of
>> existing laws – not to mention the fact that having sick and starving
>> animals on the street would cause a host of other problems. Will the
>> city trap the animals and euthanize them? This cruel, draconian
>> solution would be incredibly costly to taxpayers, would undoubtedly
>> result in the deaths of a large number of pets who could be mistaken
>> for strays, and would ultimately cause a rodent problem in the city's
>> parks. Keep in mind that cats were domesticated for a
>> reason: to prevent rat and mouse populations from spiraling out of
>> control.
>>
>> Fortunately, there is another solution that is already being widely
>> employed in Torrance and elsewhere, with great success. A
>> trap-neuter-return policy
>> (TNR) can control cat populations humanely with virtually no cost to
>> taxpayers. Under this approach, the cats are trapped, spayed or
>> neutered, vaccinated, and returned to the same location, to be fed
>> and cared for by responsible caretakers. At UCLA, a feral cat
>> population estimated to be as high as 300 was reduced to about 7 over
>> the course of several years using this approach. In cities such as
>> Santa Barbara spay-neuter programs have resulted in virtually empty
>> city shelters. And the best news is, volunteers and animal
>> organizations are more than willing to assist in these efforts,
>> taking the responsibility for trapping and neutering the animals upon
>> themselves and saving taxpayer dollars.
>>
>> The vast majority of feral cat caretakers are responsible individuals
>> who are already employing the trap-neuter-return approach. If there
>> are a few colonies in Torrance where caretakers are not behaving
>> responsibly, don't punish the entire animal community. Address the
>> problem colonies by bringing in animal organizations to assist in
>> spaying and neutering, and work with the caretakers to ensure that
>> they will feed the cats unobtrusively and will clean up after the
>> animals. Keep in mind that the people who care for stray animals are
>> not lawbreakers, but are providing a public service by controlling
>> and managing animal populations and by reducing the burden on our
>> overtaxed public shelters. And please remember that cruelty is never
>> the best approach. You have an opportunity to help these innocent
>> animals (many of whom have been abandoned by irresponsible
>> owners) in a kind, humane, and socially beneficial manner. Why would
>> you choose any other way?
>>
>> Sincerely,
>>
>> Ron Corcillo
>>
>>
>> --
>> No virus found in this incoming message.
>> Checked by AVG Free Edition.
>> Version: 7.5.432 / Virus Database: 268.15.18/586 - Release Date:
>> 12/13/2006
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>> No virus found in this outgoing message.
>> Checked by AVG Free Edition.
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>> 12/13/2006
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No virus found in this incoming message.
Checked by AVG Free Edition.
Version: 7.5.432 / Virus Database: 268.15.22/590 - Release Date: 12/16/2006 5:39 PM

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No virus found in this outgoing message.
Checked by AVG Free Edition.
Version: 7.5.432 / Virus Database: 268.15.22/590 - Release Date: 12/16/2006 5:39 PM

Herbers, Sue

From: Nowatka, Paul M.
Sent: Thursday, December 14, 2006 8:20 PM
To: Herbers, Sue
Subject: FW: Torrance feral cat ordinance

-----Original Message-----
From: corcillo@earthlink.net [mailto:corcillo@earthlink.net]
Sent: Thursday, December 14, 2006 2:56 PM
To: Drevno , Gene; Scotto, Frank; Brewer, Tom; McIntyre, Pat; Nowatka, Paul M.; Sutherland, Bill; Witkowsky, Hope
Subject: Torrance feral cat ordinance

To the Mayor and the members of the City Council:

I am writing to express my strong objections to the proposed ordinance to ban feeding of feral cats in the city of Torrance.

I understand that the move to ban feeding of feral cats stems from problems with a particular colony in one of the city's parks. While I sympathize with the position that stray cat populations need to be managed and controlled, the notion that a ban on feeding will solve the problem is severely flawed. The proposed ordinance not only is cruel and inhumane, but also will needlessly punish numerous responsible caretakers, as well as dozens of innocent, well-behaved, and socially beneficial animals. In addition, it stands in direct conflict with existing laws that mandate that citizens must assist animals in distress, and as a result would probably not withstand a legal challenge.

This ordinance would create more problems than it will solve. What will the city do with the cats if no one is allowed to feed them? Allow them to starve on the street? Such a response would amount to nothing less than animal cruelty and would be in direct violation of existing laws – not to mention the fact that having sick and starving animals on the street would cause a host of other problems. Will the city trap the animals and euthanize them? This cruel, draconian solution would be incredibly costly to taxpayers, would undoubtedly result in the deaths of a large number of pets who could be mistaken for strays, and would ultimately cause a rodent problem in the city's parks. Keep in mind that cats were domesticated for a reason: to prevent rat and mouse populations from spiraling out of control.

Fortunately, there is another solution that is already being widely employed in Torrance and elsewhere, with great success. A trap-neuter-return policy (TNR) can control cat populations humanely with virtually no cost to taxpayers. Under this approach, the cats are trapped, spayed or neutered, vaccinated, and returned to the same location, to be fed and cared for by responsible caretakers. At UCLA, a feral cat population estimated to be as high as 300 was reduced to about 7 over the course of several years using this approach. In cities such as Santa Barbara spay-neuter programs have resulted in virtually empty city shelters. And the best news is, volunteers and animal organizations are more than willing to assist in these efforts, taking the responsibility for trapping and neutering the animals upon themselves and saving taxpayer dollars.

The vast majority of feral cat caretakers are responsible individuals who are already employing the trap-neuter-return approach. If there are a few colonies in Torrance where caretakers are not behaving responsibly, don't punish the entire animal community. Address the problem colonies by bringing in animal organizations to assist in spaying and neutering, and work with the caretakers to ensure that they will feed the cats unobtrusively and will clean up after the animals. Keep in mind that the people who care for stray animals are not lawbreakers, but are providing a public service by controlling and managing animal populations and by reducing the burden on our overtaxed public shelters. And please remember that cruelty is never the best approach. You have an opportunity to help these innocent animals (many of whom have been abandoned by irresponsible owners) in a kind, humane, and socially beneficial manner. Why would you choose any other way?

Sincerely,

Ron Corcillo

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No virus found in this outgoing message.
Checked by AVG Free Edition.
Version: 7.5.432 / Virus Database: 268.15.18/586 - Release Date: 12/13/2006 6:13 PM

Herbers, Sue

From: Barnett, Gene
Sent: Tuesday, December 12, 2006 11:32 AM
To: Herbers, Sue
Subject: FW: Torrance Pending Ordinance

Sue, here is the first of the e-mails I received on the cats. I'll be forwarding several. Thanks for taking this on. Gene

-----Original Message-----
From: Jackie Sherman [mailto:silvertabby8888@yahoo.com]
Sent: Sunday, December 10, 2006 9:58 AM

Herbers, Sue

From: Nowatka, Paul M.
Sent: Tuesday, December 12, 2006 4:54 PM
To: wendy wells
Cc: Herbers, Sue
Subject: RE: Torrance's proposed Feral/Stray Cat Ordinance/Ban on feeding stray cats

Wendy, Thank you for your input. We are studying this issue now. We will gather as much information as possible before next Tuesday.

Paul

-----Original Message-----
From: wendy wells [mailto:wend_well@yahoo.com]
Sent: Monday, December 11, 2006 9:43 AM
To: hwitkowsky@torrnet.com; pmnowatka@torrnet.com; BSutherland@torrnet.com; pmcintyre@torrnet.com; GDrevno@torrnet.com; TBrewer@torrnet.com; fscotto@torrnet.com
Subject: Torrance's proposed Feral/Stray Cat Ordinance/Ban on feeding stray cats

Dear City Council Member,

I am writing today to express my strong disapproval
re: a proposed city ordinance to ban the feeding of any feral/stray cat in the city of Torrance. It is currently scheduled for the city council's consideration on December 19, 2006. I am also disappointed with the comments made by Community Services Director, Gene Barnett, in the recent Daily Breeze article of Friday Dec. 9, 2006 covering this proposed ordinance.

As some who has grown up in Torrance and who is active in the rescue and adoption of cats/kittens, it depresses and saddens me that my city has not thought out or considered the consequences of the passage of this ordinance. It is irresponsible and naive to say that the, quote, "long-term intention is certainly not to euthanize, but our long-term intention is to ensure we have the public's health and safety as a priority and we somehow get under control the abundance of feral cats that populate that park and the surrounding area" but "What mechanisms are undertaken to do that I couldn't tell you."

My question to you is what do you now expect these animals to do? And how can you manage the resulting problems if you truly are not planning to euthanize? I counter with the fact that many cities have tried to pass similar statutes, which then resulted in indiscriminate euthanization to then try to solve the even bigger problems that result from such a statute.
Ultimately the 'no feeding' ordinances were found to be a failure or, more importantly, were defeated in vote in favor of better solutions. Common sense and experience dictates that one of three inhumane scenarios and/or problems will result from the passing of this ordinance as follows:

1) The cats will simply starve to death and/or the hungry and bewildered/frightened cats will start migrating from their known and controlled environment to other neighboring areas, roaming the streets looking for food. As a result that many will be hit by cars or encounter other perils in their quest for survival.

2) City employees or pest exterminators will trap these animals for the purpose of euthanasia which in itself is extremely costly to the taxpayer. And some of these cats have been trapped before in grass roots TNR (Trap & Neuter/Spay) programs and will most likely not re-enter a trap thus wasting the city's time and energy.

3) It is difficult, if not impossible to confine the trapping and ultimate euthanizing of these feral/stray cats so it would put any outdoor cat, owned or not at risk. Many owned pets will be caught in the round-up resulting in their death if their owners do not find them at the county shelter in time.

Please keep in mind that, as stated above, the majority of the 'feral' cats/colonies targeted for these potential fates have been managed with TNR (trap, neuter, and return or

adoption) programs. A great deal of private funding and donated time has been (and continues to be) spent on colony maintenance such as this.

This brings me to my proposed alternate solution; wouldn't Torrance's time and money be better spent with ASSISTING the rescue community to maintain these colonies and/or creating their own organized program?
It has been shown that aggressive trap and release/adoption programs, along with community education and neuter/spay assistance to pet owners, not only significantly reduces the problem, but with time it can ultimately eliminate it. Neutered or spayed cats cannot reproduce! Why starve and kill when you can humanely and compassionately solve the problem entirely?

I appreciate the time you have taken to read this letter and I thank you in advance for voting AGAINST this proposed ordinance.

Sincerely,

Wendy Wells
Concerned Resident

Do you Yahoo!?
Everyone is raving about the all-new Yahoo! Mail beta.
http://new.mail.yahoo.com

Herbers, Sue

From: Barnett, Gene
Sent: Monday, December 18, 2006 8:21 AM
To: Herbers, Sue
Subject: FW: URGENT! READ! Ban on Feral Cat Feeding scheduled-Torrance CA-PLEASE HELP!

From: rayofjoy@aol.com [mailto:rayofjoy@aol.com]
Sent: Sunday, December 17, 2006 10:16 AM
To: info@uan.org; info@secondchancerescue.com; info@muchlove.org; info@maddiesfund.org; info@karmarescue.org; info@faircares.org; info@dogsdeservebetter.org; info@capoanimalrescue.com; info@animalsanctuary.org; info@animalplace.org; info@animalavengers.com; info@animalavengers.com; info@actorsandothers.com; feralcatalliance@yahoo.com; feralcat@yahoogroups.com; feralcatflute@yahoo.com; MeoowzResQ@aol.com; carlas_cats@yahoo.com; sophiecat5@adelphia.net; adoptcacat@mail.com; kayisforkats@yahoo.com; catconnection@sbcglobal.net; Bernzycat@aol.com; dustkitten@adelphia.net; cmetropole@aol.com; MeoowzResQ@aol.com; catsatthestudio@yahoo.com; Carolecatmom@aol.com; cat@tobyandfriendsrescueinc.org; Catnippedm@aol.cfom; CatRescuers@yahoogroups.com; kittenrescue@yahoogroups.com; kittybuster@hotmail.com; TISHALACEY@cox.net; phantom.rescuer@earthlink.net; ck27paws@sbcglobal.net; critters911@gmail.com; wishstar@sbcglobal.net
Subject: URGENT! READ! Ban on Feral Cat Feeding scheduled-Torrance CA-PLEASE HELP!

To All you Officials,
I write you this on behalf of the hundreds of thousands of Animal Activists in California and plead with you not to even consider this extremely inhumane ordinance to ban the feeding of God's precious creatures! Isn't there enough harm that has come to them already because of man's total disregard and inhumanity? Wouldn't it be far better to create a policy to get ALL the dogs and cats spayed and neutered, and FINE the people who selfishly breed for greed? The funds collected could be used to install such a spay and neuter program, thus prevent the birth of unwanted dogs and cats instead of contributing even more to their misery by starvation. Haven't they suffered by the hands of insensitive individuals enough already?

I beg you on behalf of hundreds of thousands of other concerned citizens to put an end to this unconscionable ordinance.

Starving is a very painful way to kill God's precious creatures...
there are alternatives...

Here are the statistics as to the amount of feral cats you will be starving to deathn Is this what you really want to do? Far better to fine the residents for allowing their dogs and cats to run "free" and to allow them to "breed without licenses"; use the steep fines to institute a free spay and neuter clinic to cut down drastically on the population of unwanted animals. Believe me, if you did that you would have more than enough whistle blowers to report the cruelty of abandoning their pets, and lots of cash flow coming your way to help save these poor cats..... Just a little effort on your part to save God's precious creation.

One female cat and her mate; by producing just 2.8 surviving kittens will have:
in 1 year 12 cats
in 2 years 67 cats
in 3 years 376 cats
in 4 years 2,107 cats
in 5 years 11,801 cats
in 6 years 66,088 cats
in 7 years 370,092 cats
in 8 years 2,072.514 cats
in 9 years 11,606.077 cats

How many cats are you prepared to KILL BY STARVATION? Don't you think you are merely putting a band-aid on this situation instead of getting to the core of it all by passing a law that people caught breeding will pay a fine and institute a steep fine for doing this? Believe me there will be tons of whistle blowers on these insensitive and greedy breeders, and it will then be so easy to track them down, get the funds and get these poor defenseless creatures spayed and neutered instead of inflicting even more pain and suffering..

Please reconsider!

Joy Ray
RAYning Catts 'N Doggs

~~~~~~

I beg you on behalf of hundreds of thousands of other concerned citizens to put an end to this unconscionable ordinance.

Joy Ray, RAYning Catts N Doggs

~~~~~~~ -----Original Message-----
From: dogfishdonna@earthlink.net
To: dogfishdonna@earthlink.net
Sent: Fri, 15 Dec 2006 10:43 AM
Subject: Ban on Feral Cat Feeding scheduled-Torrance CA-PLEASE HELP!

*** Together we can turn the tide! We really can live side - by - side with animals (domestic and wild), I don't know about you but I do it every day. I'm sure the Mayor of Torrance can be shown how to find a way!

On December 19, 2006, a proposed city ordinance to **ban the feeding of any feral/stray cat in the city of Torrance** is scheduled for the city council's consideration. **This will affect every feral/stray cat currently being fed**, including the cats that are maintained with a TNR (trap, neuter, return/adopted out) program, on any land owned by the city of Torrance.
If passed, it will also pave the way for other cities to follow suit.

This will potentially put any outdoor cat -- owned or not -- at risk.

The agenda of city council meetings are subject to change up until two days prior to the meeting. Please check this link and go to the date of December 19th and then go to the "Hearings" section to see if this proposal is on the agenda for that day:
http://www.ci.torrance.ca.us/11942.htm

Your attendance and support at this meeting will be crucial to the outcome of this proposed ordinance, as will your letters/emails sent to the officials listed at the bottom of this page prior to the meeting.

Please remember that in any form of correspondence, our voices will be heard much clearer if the dialogue is delivered in a polite and succinct manner.

Some of you may have seen the recent Daily Breeze article (Friday Dec. 9, 2006) covering this proposed ordinance.
http://www.dailybreeze.com/news/articles/4862743.html?showAll=y&c=y

Please note the following quote from Community Services Director Gene Barnett taken from the Daily Breeze article which shows that the consequences of the passage of this ordinance do not appear to be well-thought out.
"Our long-term intention is certainly not to euthanize, but our long-term intention is to ensure we have the public's health and safety as a priority and we somehow get under control the abundance of feral cats that populate that park and the surrounding area," he said. "What mechanisms are undertaken to do that I couldn't tell you."
As the article points, the city of Torrance is looking to pass an ordinance to make it unlawful to feed feral/stray cats. Our question to the city officials is "what do you now expect these animals to do?"
Common sense dictates that one of three inhumane scenarios will result from the passing of this ordinance:
1) The cats will simply starve to death.
2) The hungry and bewildered/frightened cats will start migrating from their known and controlled environment to other neighboring areas, roaming the streets looking for food with the result that many will be hit by cars or encounter other perils in their quest for survival. (Keep in mind that the majority of these cats have already been trapped (TNR'd) and will most likely not re-enter a trap. They will then start to search for a source of food.)
3) City employees or pest exterminators will trap them for the purpose of euthanasia which will be extremely costly to the taxpayer.
As stated above, most of the colonies targeted for these potential fates have been managed with an aggressive TNR program. A great deal of private funding and donated time has been - and continues to be -spent on colony maintenance.
Also bear in mind that if the city decides to start trapping and euthanizing these feral/stray cats, many owned pets will be caught in the round-up resulting in their death if their owners do not find them at the county shelter in time.
We thank you for your support and appreciate your time taken to contact the city officials.

Mary Zeitler, President TLC Adoptions, Inc.
PO Box 1538
Torrance, CA 90505
(310) 373-1585

Debra Corwin, President Purrfect Partners, Inc.
PO Box 168
Redondo Beach, CA 90277
(310) 370-0526

Contact information for city officials is as follows:

Community Services Director:

Gene Barnett
gbarnett@torrnet.com
(310) 618-2939
Fax (310) 781-7502

Torrance city council members:

Mayor, Frank Scotto, fscotto@torrnet.com

Tom Brewer, TBrewer@torrnet.com

Gene Drevno, GDrevno@torrnet.com

Pat McIntyre, pmcintyre@torrnet.com

Paul M. Nowatka, pmnowatka@torrnet.com

Bill Sutherland, BSutherland@torrnet.com

Hope Witkowsky, hwitkowsky@torrnet.com

Torrance Animal Control:

Patrick Wren
(310) 618-3850

Thank you so much!

RE: Ban on Feral Cat Feeding - Proposed Ordinance for Torrance, California

From Jo of www.PurrfectPartners.com

"Hi David, Thanks for sending these e-mails regarding the Feral Cat feeding ban. Word from Debra as of yesterday is that the Mayor wants the cats removed, period, end of story. They don't seem to be getting anywhere with this. It is bad news, because Debra says once Torrance adopts this ordinance, the other neiboring cities will follow. It is going to affect so many cats. It so sad." --- Jo

The other issue for us caretakers is we will either have to comply OR face fines and being arrested for trespassing (which they said they will enforce) that of course puts our own pets and fosters in jeopardy. So we will be forced to comply and watch the suffering. As caretakers, even though we never get to hold them and pet them, we still watch their playfulness, we have a bond and now we will have to be party to this betrayal. Our only hope is that there is enough public outcry and bad press for the Mayor that he is forced to surrender. -- David

I spoke to our district office about this and forwarded this information to the Senator and Assemblymember that has Torrance in their district. Thanks for this information and I hope to hear that Torrance does NOT adopt this awful ordinance. Thank you.

Meegen Murray
Legislative Assistant
Senator Alan Lowenthal, District 27
Ph: 916-651-4027
Fax: 916-327-9113
Meegen.Murray@sen.ca.gov

My friend sent this to me about an effort by the city of Torrance, California to make feeding feral cats illegal. This is a huge step backward. In the attachment you'll find key people within the city to contact. If you have a moment please let them know this is WRONG. If Torrance is able to pass such an ordinance, I believe other cities like Long Beach will follow suit. The local paper is the Daily Breeze.

=

Check out the new AOL. Most comprehensive set of free safety and security tools, free access to millions of high-quality videos from across the web, free AOL Mail and more.

Herbers, Sue

From: Witkowsky, Hope
Sent: Friday, December 15, 2006 12:40 PM
To: 'Melody Halligan '
Cc: Herbers, Sue
Subject: RE: URGENT! READ! Ban on Feral Cat Feeding scheduled

thanks for your insightful information.

Councilwoman Hope Witkowsky
-----Original Message-----
From: Melody Halligan
To: fscotto@torrnet.com
Sent: 12/15/2006 12:30 PM
Subject: URGENT! READ! Ban on Feral Cat Feeding scheduled

To All Officials,

On December 19, 2006, a proposed city ordinance to ban the feeding of any feral/stray cat in the city of Torrance is scheduled for the city council's consideration. This will affect every feral/stray cat currently being fed, including the cats that are maintained with a TNR (trap, neuter, return/adopted out) program, on any land owned by the city of Torrance.

Common sense dictates that one of three inhumane scenarios will result from the passing of this ordinance:

1) The cats will simply starve to death.

2) The hungry and bewildered/frightened cats will start migrating from their known and controlled environment to other neighboring areas, roaming the streets looking for food with the result that many will be hit by cars or encounter other perils in their quest for survival. (Keep in mind that the majority of these cats have already been trapped (TNRd) and will most likely not re-enter a trap. They will then start to search for a source of food.)

3) City employees or pest exterminators will trap them for the purpose of euthanasia which will be extremely costly to the taxpayer.

As stated above, most of the colonies targeted for these potential fates have been managed with an aggressive TNR program. A great deal of private funding and donated time has been - and continues to be -spent on colony maintenance.

Also bear in mind that if the city decides to start trapping and euthanizing these feral/stray cats, many owned pets will be caught in the round-up resulting in their death if their owners do not find them at the county shelter in time.

I write you this on behalf of the hundreds of thousands of Animal Activists in California and plead with you not to even consider this extremely inhumane ordinance to ban the feeding of God's precious creatures! Isn't there enough harm that has come to them already because of man's total disregard and inhumanity? Wouldn't it be far better to create a policy to get ALL the dogs and cats spayed and neutered, and FINE the people who selfishly breed for greed? The funds collected could be used to install such a spay and neuter program, thus prevent the birth of unwanted dogs and cats instead of contributing even more to their misery by starvation. Haven't they suffered by the hands of insensitive individuals enough already?

I beg you on behalf of hundreds of thousands of other concerned citizens to put an end to this unconscionable ordinance.

P.S. I forgot to give you the statistics as to the amount of feral cats you will be starving to death:

One female cat and her mate; by producing just 2.8 surviving kittens will have:

in 1 year 12 cats

in 2 years 67 cats

in 3 years 376 cats

in 4 years 2,107 cats

in 5 years 11,801 cats

in 6 years 66,088 cats

in 7 years 370,092 cats

in 8 years 2,072.514 cats

in 9 years 11,606.077 cats

How many cats are you prepared to KILL BY STARVATION? Don't you think you are merely putting a band-aid on this situation instead of getting to the core of it all by passing a law that people caught breeding will pay a fine and institute a steep fine for doing this? Believe me there will be tons of whistle blowers on these insensitive and greedy breeders, and it will then be so easy to track them down, get the funds and get these poor defenseless creatures spayed and neutered instead of inflicting even more pain and suffering..

Please reconsider!

Melody Halligan

Redondo Beach, CA 90277

" Until he extends the circle of his compassion to ALL living things, man himself will not find peace" [Albert Schweitzer]

"The greatness of a nation and it's moral progress can be judged by the way it's animals are treated" [Gandhi (1869-1948)]

"What is man without the beasts? If all the beasts were gone, man would die from great loneliness of spirit, for whatever happens to the beasts also happens to man. All things are connected. --Chief Seattle

Herbers, Sue

From: Scotto, Frank
Sent: Monday, December 18, 2006 9:17 AM
To: Herbers, Sue
Subject: FW:

-----Original Message-----
From: Heather Reynolds
To: Scotto, Frank
Sent: 12/16/2006 7:53 PM

Regarding the banning of feeding feral cats in Torrance, I can honestly say that I am totally ashamed to say that I am from Torrance... If I still lived there, and were one of the kind people that were feeding these cats, I would still feed them, ban or not..

These cats did not ask for this type of existence.. at least they are being taken care of..

the city council should be ashamed of themselves..

I hope you and your family enjoy your nice warm beds, cozy homes and plenty of food on your tables..

whatever happened to compassion?? can you really live with yourself knowing these cats may starve to death??

How pathetic this city has become..

Hollie Reynolds..

Herbers, Sue

From: Scotto, Frank
Sent: Monday, December 18, 2006 9:17 AM
To: Herbers, Sue
Subject: FW:

-----Original Message-----
From: JOSEPH PAZIENZA
To: Scotto, Frank
Sent: 12/16/2006 11:49 AM

Dear Mayor, I hope you do not adopt an ordinance to ban the feeding of feral cats. Instead, why don't you work to solicit the help of more volunteers to help get them all fixed, so that they can't reproduce.
Don't be cold and heartless!!!!! Try some kindness - it's Christmas.

Marilyn Pazienza

Cessna, Linda

From: jillb@aspca.org
Sent: Monday, December 18, 2006 1:52 PM
To: lcessna@torrnet.com
Cc: davidryoung@linkline.com
Subject: Feral Cat Feeding

Dear Ms. Cessna:

Attached is a copy of a letter I have sent to the Mayor and City Council members of Torrance regarding my concern about a possible ban on the feeding of feral cats. It is my understanding that you and your committee will be reviewing the issue. Thank you very much for taking the time to evaluate this. If you have any questions or if I can provide you with any resources, please don't hesitate to contact me.

Sincerely,

Jill A. Buckley, Esq.
Legislative Liaison
ASPCA
P.O. Box 48
Pismo Beach, CA 93448
Phone: (805) 474-9660
Fax: (805) 474-9740
jillb@aspca.org

Please note: The ASPCA Legal Department provides counsel to the ASPCA and cannot give out legal advice to or act as an attorney for outside organizations or individuals. We do, however, offer information on resources nationwide that may be helpful in resolving problems.

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Jill A. Buckley, Esq.
Legislative Liaison
ASPCA

P.O. Box 48
Pismo Beach, CA 93448

jlb@aspca.org
tel. 805-474-9660
fax 805-474-9740
www.aspca.org

December 15, 2006

The Honorable Frank Scotto, Mayor
City Council Members: Mr. Tom Brewer, Ms. Gene Drevno, Ms. Pat McIntyre, Mr. Paul M. Nowatka, Mr. Bill Sutherland, Ms. Hope Witkowsky
City of Torrance
3031 Torrance Blvd.
Torrance, CA 90503

RE: Proposed Ban on Feeding and Caring of Feral Cats in the City of Torrance

Dear Mayor and City Council Members:

On behalf of the American Society for the Prevention of Cruelty to Animals (ASPCA) and its 100,000 California members and donors, I respectfully urge you not to consider a ban on the feeding and caring of feral cats in the City of Torrance.

Most attempts to eradicate feral cat colonies have failed. At this time, the most humane and effective strategy for controlling feral cat populations is trap/neuter/return, or TNR, whereby all the cats in a colony are trapped, sterilized, and returned to their colony, ideally to be managed by a caretaker who monitors the animals' health and remains vigilant that any newcomers are immediately sterilized. This stabilizes the population of the colony and, over time, reduces it. At the same time, the objectionable spraying, vocalizing and fighting behaviors of the colony are largely eliminated.

The ASPCA supports the principle of managed colonies for feral cat population control until the colony size can be reduced by attrition. Sociable animals should be placed in new homes if available. Ongoing care-giving, including food, water, shelter and veterinary care (where necessary) must be provided. In situations where it is difficult to manage the colony, the cats should be captured and adopted out if possible.

I again ask you to reconsider a ban on the feeding and caring of feral cats. Please feel free to contact me and I would be more than willing to provide you with resource information.

Sincerely,

Jill A. Buckley, Esq.
Legislative Liaison

WE ARE THEIR VOICE

Jill A. Buckley, Esq.
Legislative Liaison
ASPCA

P.O. Box 48
Pismo Beach, CA 93448

jillb@aspca.org
tel. 805-474-9660
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December 15, 2006

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City Council Members: Mr. Tom Brewer, Ms. Gene Drevno, Ms. Pat McIntyre, Mr. Paul M. Nowatka, Mr. Bill Sutherland, Ms. Hope Witkowsky
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Torrance, CA 90503

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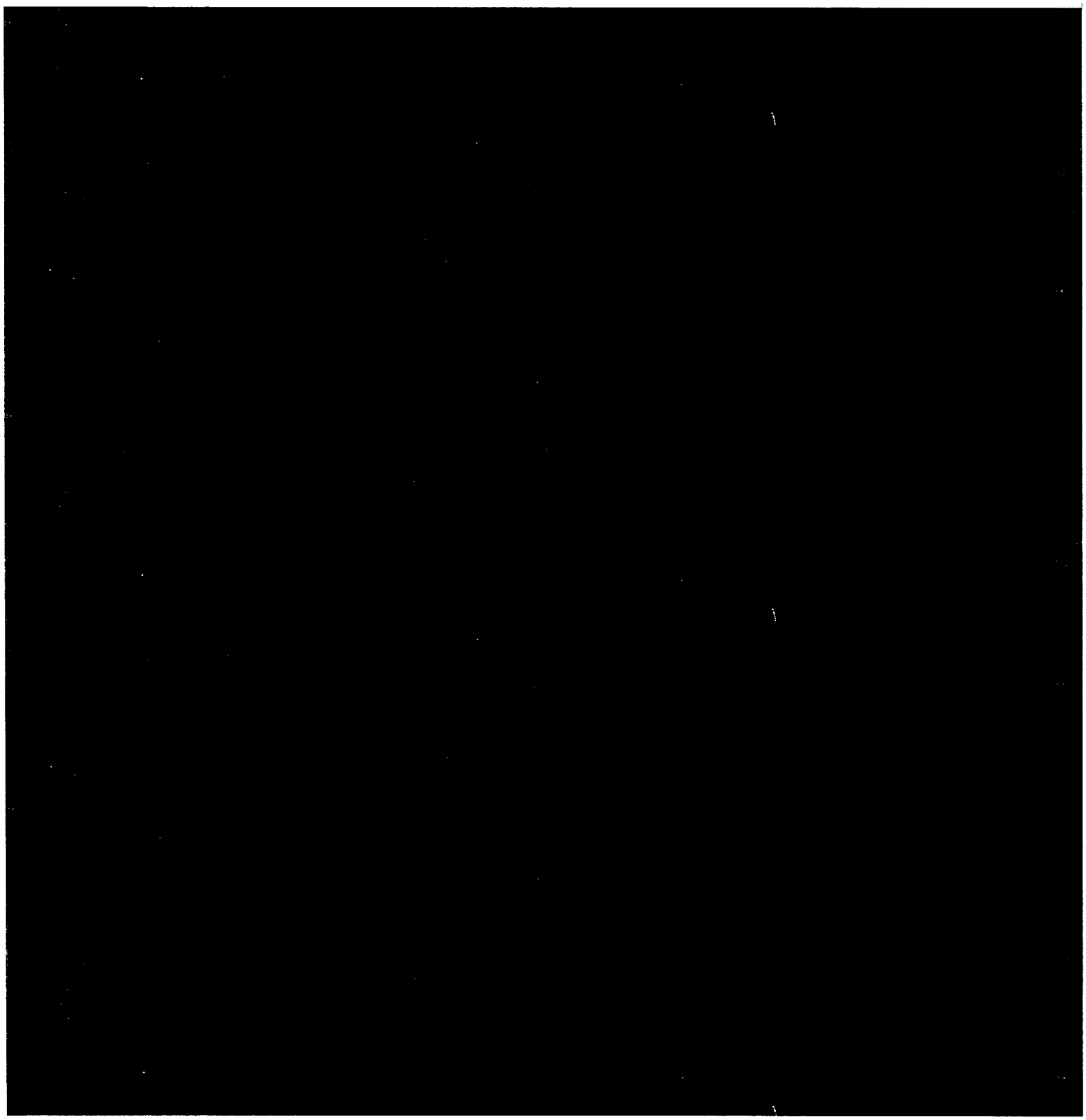
I again ask you to reconsider a ban on the feeding and caring of feral cats. Please feel free to contact me and I would be more than willing to provide you with resource information.

Sincerely,

Jill A. Buckley, Esq.
Legislative Liaison

Cessna, Linda

From: Nancy Peterson [NPeterson@hsus.org]
Sent: Monday, December 18, 2006 12:00 PM
To: lcessna@torrnet.com
Subject: Feral Cats



Cessna, Linda

From: Kay Liscomb [Kliscomb@hsus.org]
Sent: Wednesday, December 20, 2006 3:14 PM
To: lcessna@torrnet.com
Cc: Nancy Peterson
Subject: FW: Feral Cats

Dear Ms. Cessna:

Could you please add me to your email list, for updates on the local feral cat issue? I may be interested in attending, on behalf of HSUS, any hearings or meetings that may be held.

Thanks kindly,
Kay Liscomb

Katherine B. Liscomb, CAE
Vice President, Administration & Animal Care Centers
The Humane Society of the United States/Southern California Office
185 Via Las Brisas
San Marcos, CA 92069
Office# 760-290-3892
Fax# 760-290-3891
Cell# 301-793-7861

-----Original Message-----
From: Nancy Peterson
Sent: Monday, December 18, 2006 3:00 PM
To: 'lcessna@torrnet.com'
Subject: Feral Cats

Dear Ms. Cessna:

I understand that Mayor Scotto has referred the matter of feral cats in Wilson Park to the Environmental Quality Commission. Please forward to the commission the attached letter I sent to the Mayor and Council Members.

Kindly add me to your email list so I may be informed of future meetings concerning this issue.

Sincerely,

Nancy Peterson
Feral Cat Program Manager
The Humane Society of the United States
2100 L Street, NW
Washington, DC 20037
301-258-3129 (p)
301-258-3081 (f)
www.hsus.org

Start planning now to attend Animal Care Expo 2007, the nation's premier animal

welfare conference! For information on the May 9-12 event in Dallas, Texas, call 1-800-248-EXPO or visit www.AnimalSheltering.org/expo.

Interested in taking action online to help animals? Then join our online community and sign up for our Humane Action Network. Go to www.hsus.org/join .

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December 12, 2006

City of Torrance
City Hall
3031 Torrance Blvd.
Torrance, CA 90503

Dear Mayor Scotto & City Council Members:

I recently read an article, "Torrance gears up for catfight over proposed ordinance." It seems that you are considering an ordinance to ban feeding homeless cats in your community as a strategy to control their populations.

Feeding bans are generally ineffective when dealing with homeless cats because the cats don't simply go away. Attempts to starve out cats only result in continued reproduction and hungrier and unhealthier animals who are more vulnerable to disease and severe parasitic infestations. Furthermore, nothing is harder than trying to stop caring people from putting out food once they know there are cats in need. In addition, although removing the cats may provide a short-term reduction in their population, other homeless cats will move in to take advantage of the food and shelter, and you will be involved in an endless cycle of trapping and euthanizing – which will be costly financially and in terms of poor community relationships.

We support managed Trap-Neuter-Return (TNR) programs to reduce the numbers of free-roaming feral cats. Feral cats are unsocialized cats who may be one or more generations removed from a home environment and may live in a group, or colony, of similar cats. These cats and their offspring are victims of abandonment, accidental loss, and failure by owners to sterilize their pets. Lost and abandoned tame strays should be evaluated for placement in loving homes.

A reduction in the cat population will mean fewer nuisance complaints (about overpopulation, fighting, spraying, and roaming) to animal control and city officials, fewer public health risks (bites, rabies), and less predation.

For more information on TNR, please visit our website at www.hsus.org/feralcats and the website of Neighborhood Cats at www.neighborhoodcats.org. If I can be of assistance, please contact me.

Sincerely,

Nancy Peterson

Promoting the protection of all animals
2100 L Street, NW, Washington, DC 20037 • 202-452-1100 • Fax: 202-778-6132 • www.hsus.org

Cessna, Linda

From: David Young [davidryoung@linkline.com]
Sent: Monday, December 18, 2006 4:08 PM
To: lcessna@torrnet.com
Subject: More info on control of fleas in Park.

Capstar can be put into feral cat food as an effective means of keeping them flea free. It is not harmful to the environment, mammals, and avian species.

http://www.capstar.novartis.us/

Cessna, Linda

From: David Young [davidryoung@linkline.com]
Sent: Monday, December 18, 2006 2:26 PM
To: lcessna@torrnet.com
Subject: Control of fleas in Park.

Linda,

The attached article. http://www.pmra-arla.gc.ca/english/consum/fleas-e.html.
Talks about indoor and outdoor control of fleas. In particular, please see the information on

diatomaceous earth which I understand can be mixed in water be spayed on the affected

areas.

Jeannie Young who runs the feral cat program at Harbor UCLA Med Center, uses
Program, a tablet that you crush and put in their food to control the fleas. 100 cats, 3 month supply, $300.00....this is roughly the cost, maybe can get in bulk less expensively.

David Young
310-370-4871

Health Canada Santé Canada

Effective Control of Fleas

March 2003

It is a common fallacy that all cats and dogs have fleas. Most of these animals can be kept free of fleas if basic hygienic practices are followed.

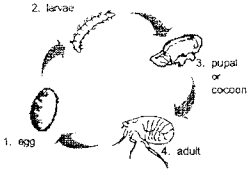
Fleas are a common pest of many types of animals, including humans. While cats and dogs are the primary hosts of fleas in and around the home, humans can often become secondary hosts in the absence of domestic pets. A female flea can lay 25 eggs per day, producing approximately 800 eggs in its life. Although fleas usually feed several times a day on animals, they can survive several weeks without a meal. Adult fleas usually leave the host after feeding; however, flea eggs, larvae or pupae may be found on pets.

The peak season for flea infestations outdoors in most parts of Canada is from early August to early October. In excessively dry, hot summers flea populations tend to decrease; fleas are unable to retain moisture and they dehydrate and die.

Only female fleas bite. The bites cause the formation of a small, hard, red, itchy spot on the skin. When the flea pierces the skin with its mouthparts, it injects a salivary secretion to prevent its host's blood from clotting. The itchiness is due to a reaction of the body's immune system to substances in the salivary secretions. Reactions are specific to each individual; some may be more affected than others. To relieve the itchiness, apply ice cubes or calamine lotion to the bite.

Lifecycle

Fleas have four stages of development: egg, larval, pupal and adult. The life cycle varies depending on the flea species, temperature, humidity and the availability of food. The optimum development period from egg to adult is two to three weeks; however, when conditions do not favor rapid development the cycle may take several months.



Egg Stage
After each blood meal, female fleas lay four to eight smooth, round, light-coloured, sticky eggs. Eggs laid on a host can easily fall or be brushed off. High concentrations are usually present in pet bedding, boxes or kennels.

Larval Stage
Eggs hatch into very small, hairy, wormlike larvae that are whitish with brownish heads. The larvae are about 1.5 mm long and may grow to five mm. During this time they avoid light and are sensitive to changes in humidity and temperature. Flea larvae feed on organic debris, their own cast skins and on dried blood present in the excrement of adult fleas. Larvae can survive for up to 200 days in unfavourable conditions and can travel distances of up to 30 cm per minute. Flea larvae will coil around the nearest object, often carpet fibres, in order to avoid the suction of a vacuum.

Pupal Stage
In the third stage of development, flea larvae spin silken cocoons covered with particles of dust, fibres, sand and organic debris. Within this cocoon, the larvae metamorphose in the shape of adult fleas. They are white in colour at the onset and change to brown before emerging.

Adult Stage
Adult fleas are small, dark brown or reddish brown insects ranging in length from 1 to 4 mm. Their bodies are flattened from side to side allowing them to move easily through hair or fur. Although they are wingless, their stout hind legs are well adapted for jumping. Fleas can jump a maximum distance of 20 cm vertically and 40 cm horizontally. Their comb like, spiny legs make it difficult to detach fleas from a host.

Adult fleas may remain in the pupal chamber for several months until favorable conditions, such as increased temperature and carbon dioxide concentrations, favor their emergence. Vibrations indicating the presence of a host also stimulate their emergence. This explains why fleas in unoccupied homes become active as soon as humans or pets re-enter.

How to Control Fleas in and Around the Home

The following tips may help to reduce or eliminate flea infestations significantly. To break the flea cycle successfully the homeowner must rely on a combination of thorough sanitary practices and chemical treatments.

Sanitation
Vacuuming on a daily basis to remove eggs, larvae and adults is the most effective method to gain initial control of a flea infestation. It is important to include the following areas: carpets, cushioned furniture, cracks and crevices on floors and along baseboards, and the basement.

Steam cleaning carpets may also help [illegible] steam and soap [illegible] all stages of the flea [illegible] particular attention to areas where pets sleep.

Wash all pet bedding, including bedding in which pets lie in fur, [illegible] every two to three weeks. This is an important step in flea control as about [illegible] of the host, which then fall off in [illegible] pets rest. Wash blankets by all [illegible] and scattering the eggs and larvae. If infestation is severe, discard old pet bedding and replace it with fresh, clean material.

Chemical Control
Treatment with an insecticide is usually required to suppress a severe infestation. There are numerous flea products registered for use in Canada. Since these [illegible] and uses may vary, [illegible] read label directions [illegible] before purchasing and using a product.

While insecticides [illegible] flea eggs, they will control adult fleas [illegible] one. A repeat treatment is then [illegible] to break the cycle. As a general [illegible] application of a residual insecticide [illegible] days (from a 14 day interval). Re-treat [illegible] necessary or as indicated on the product [illegible]

Fleas and flea larvae tend to hide in dark corners, behind and under furniture, under the edges of area rugs, in cracks and crevices along baseboards, floorboards, heating vents and in areas where the ground is shaded and moist. It recommended on the label, treat areas such as pet sleeping quarters.

When using a flea product registered for use on mammals, do not treat sheets or blankets. Washing them in hot water will kill resistant fleas, eggs and larvae.

Treat around doors, windows, frames and foundations with a residual insecticide to help prevent entry into the home. Check all screens to ensure they are in good repair. Treatment of the yard, although [illegible] in reducing adult pupa areas of pets should be considered as part of the overall preventive program. Cover children's sandboxes when not in use.

Flea control products registered in Canada for use by homeowners or professional exterminators include chemicals such as bendiocarb, carbaryl, and propoxur. These are indicated on the label under the heading "ignitable". Other insecticides are derived from natural sources such as diatomaceous earth, pyrethrins, boric acid and rotenone. Some products may contain a combination of both chemically and naturally derived insecticides.

The following provides information on some of the active ingredients registered for use against fleas.

A general surface treatment with **bendiocarb**, a pyrethroid insecticide, is effective against fleas. Bendiocarb is formulated as a wettable powder. Once diluted in hot water it can be applied lightly between and under cushions or upholstered furniture, lounges, and floor coverings.

Boric acid, a chemical of lesser toxicity to humans, can be used to control fleas. Domestic users can purchase the dust form of the product which should be applied as a light coating. If the coating is too thick, the insect will simply avoid going in its path. The paste form is available as pest control experts for treatment of cracks and crevices.

Boric acid, a stomach poison, is ingested while the insects clean themselves. Applied where the insects are likely to be, it takes about 10 days to be effective. Boric acid may be effective for many years when these areas are kept dry.

Diatomaceous earth, a fine powder also known as silicon dioxide, consists of marine microorganisms. As the insects crawl over the fine powder, their waxy outer protection is scratched, causing them to dehydrate and die. Diatomaceous earth is now toxic to humans and pets and will remain active as long as it is kept dry once applied.

Silica aerogel is usually combined with pyrethrum. The pyrethrum component provides a quick knockdown of the insects while silica aerogel works like diatomaceous earth.

The insect growth regulator **methoprene** acts on the immature life stages of fleas, preventing adults from developing and emerging. Methoprene mimates an essential insect juvenile hormone. Flea eggs deposited on, and larvae crawling onto, treated areas will not develop into

C-93

adult fleas. However, adult fleas and flea pupae are not affected. Therefore, an adulticide to control adult fleas may be necessary. Methoprene is effective for three to seven months and is considered to be of very low toxicity to humans. It can be used safely inside infested rooms.

Pyrethrin, an insecticide derived from the dried flower heads of chrysanthemums, can be used on many surfaces. While most pyrethrin products provide a rapid knockdown of adult fleas, they lack the residual activity necessary for complete control. However, a micro-encapsulated pyrethrin formulation is available which allows the insecticide to be released slowly over a longer period of time. These products are generally sold by veterinarians. Vacuuming of treated surfaces after this product is applied will reduce its efficacy. Pyrethrin products have a very low toxicity for humans and pets; however, they may cause an allergic reaction in some individuals.

Active ingredients such as **permethrin** and **d-trans allethrin**, also registered for the control of fleas, are synthetic copies of pyrethrum and act on the pest in the same way.

Flea Growth Regulators

The use of the insect growth regulator "methoprene" acts on the immature life stage of fleas, preventing adults from developing and emerging. Flea eggs deposited on, and larvae crawling onto treated areas will not develop into adult fleas. However, existing adult fleas and flea pupae are not affected. An adulticide to control adult fleas may be necessary for immediate relief. Quarterly applications of methoprene to areas which may harbor fleas such as carpets, furniture and pet's sleeping areas, may be necessary once initial treatment has been conducted with a conventional insecticide.

Flea Control on Pets

The regular inspection of pets, especially during peak flea season, is essential. Look for the presence of "flea dirt" (black particles the size of milled pepper) on the skin. Use a registered product for the control of fleas once an infestation has occurred. Before using a product, read the label carefully and consult with a veterinarian to determine the best method of treatment.

- Flea combs are very effective tools in the suppression of adult fleas. They allow hair to pass through the tines but not the fleas, removing fleas as well as flea feces and dried blood. Focus combing on those parts of the pet where the most fleas congregate, usually the neck or tail area. When fleas are caught, deposit them in hot soapy water to kill them.
- Flea collars will prevent fleas from biting your pet. They do not, however, provide adequate control once an infestation has occurred. Some animals may develop a skin rash from flea collars.
- Powders are not as effective for pets with thick, matted fur or a heavy undercoat.
- Foams may be preferable to sprays for nervous pets, especially cats.
- Flea shampoos will kill fleas on direct contact but provide little residual control. Giving the animal an occasional bath in soap and water can therefore be useful in reducing a flea population. Dogs are generally more amenable to bathing than cats.
- A micro-encapsulated (slow-release) pyrethrin spray is available through veterinarians and provides effective long-term control of fleas.
- Oral medication is available that leaves a residue in the pet's bloodstream that is toxic to fleas when they bite. Since some pets are allergic to flea bites, some veterinarians consider this method to be less desirable.
- Treatment for tapeworm infestations may be required, as fleas carry the intermediate form of this parasite. Consult your veterinarian for further information.

Read all label instructions carefully to prevent any possible toxic over-exposure of an insecticide to your pet. It is equally important to keep the amount and combination of different chemical exposures to a minimum, especially if pets are already taking some form of medication.

Other Methods of Control

The following methods of control can be found in published literature and are reported by some to be effective. However, these are not recognized methods of flea control as no scientific evidence exists to demonstrate their safety, merit and value.

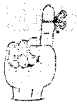
Vacuuming a pet to remove any fleas from its fur may be effective. This is apparently something a pet can learn to enjoy.

Moth crystals in vacuum cleaner bag: Placing moth crystals, crushed mothball's or cut up flea collars in vacuum cleaner bags has sometimes been recommended to kill fleas sucked up by the vacuum and is believed by some to have a fumigant effect. Vacuum cleaner bags should always be discarded outside of the house after use or wrapped in a plastic bag and stored in the freezer between uses. Mothballs should only be used in a small enclosed space such as a drawer, box or vacuum cleaner bag. Use mothballs only where they are inaccessible to children.

Pennyroyal or eucalyptus oil bath: An other option is to bathe the pet in water containing pennyroyal or eucalyptus oil, which supposedly kills fleas. Badly infested dogs should be bathed every two weeks while cats need this treatment only once per month.

Garlic or brewer's yeast may also be added to the pet's daily diet, as they repeatedly repel fleas.

Ultrasonic devices: There is currently no evidence to suggest that ultrasonic devices work to control fleas.



Remember

Before Purchasing a Pesticide Product

- Identify the pest correctly.
- Use physical control methods and alternatives to pesticides.
- Read the label directions and safety precautions before buying the product. The label must include the name of the pest to be controlled and the treatment: location (e.g. indoor, outdoor, garden use, pet treatment).
- Purchase only the quantity of product needed for the treatment.
- Alternatively, you may choose to hire a licensed pest control operator.

When Using a Pesticide

- Carefully read all label instructions and precautions before using pesticides.
- Do not drink, eat or smoke while applying pesticides.
- Persons and pets should vacate the area during treatment. Cover or remove aquaria.
- If kitchen area is to be treated, cover or remove food, dishes and utensils.

After Handling a Pesticide

- Always wash your hands thoroughly after handling any pesticide product.
- Do not permit persons or pets to contact treated surfaces until residue has dried completely.
- Provide adequate ventilation of treated areas after use.
- Wipe clean all surfaces that come in direct contact with food such as counters, tables and stovetops, including indoor and outdoor surfaces.
- Always store pesticides out of reach of children and pets, and away from food and beverages.

In Case of Accidental Poisoning

- Call a poison control centre immediately and seek medical attention.
- Take the pesticide container or label with you to the emergency facility or physician.
- Follow the first aid statements on the label.
- In case of accidental poisoning of pets, seek veterinary attention immediately.

When Disposing of Pesticides

Do not reuse empty pesticide containers. Wrap and dispose of in household garbage.

Unused or partially used pesticide products should be disposed of at provincially or municipally designated household hazardous waste disposal sites.

Use Common Sense

- These are general recommendations.
- Consult the label for specific instructions.
- When in doubt, contact a professional.

Pest Management Regulatory Agency
2720 Riverside Drive
Ottawa ON K1A 0K9

Pest Management Information Service
Telephone: 1 800 267 6315
From outside Canada: (613) 736-3799*
*Long distance charges apply.
Fax: (613) 736-3758
Internet: www.pmra-arla.gc.ca

Canada

C-94

Herbers, Sue

From: Scotto, Frank
Sent: Tuesday, December 26, 2006 8:12 AM
To: Herbers, Sue
Subject: FW: Proposed Ordinance

-----Original Message-----
From: Beverly Houwing
To: Scotto, Frank; Brewer, Tom; Drevno , Gene; McIntyre, Pat; Nowatka, Paul M.; Sutherland, Bill; Witkowsky, Hope
Sent: 12/24/2006 11:08 AM
Subject: Proposed Ordinance

Dear Mayor and City Council Members of Torrance, When the matter comes up during your city council meeting regarding the banning of feeding stray/feral cats I hope you please will consider NOT SUPPORTING this measure.

This is not a very effective or humane way to deal with the strays/ferals in Torrance. There are rescue groups which operate in Torrance to manage colonies and assist with getting strays/ferals neutered and spayed, as well as adopting out ones which are friendly enough to be pets. I hope you can collaborate with this community to reach a mutually agreeable plan, which doesn't make the cats the victims.

If Torrance uses resources for trapping strays and sending them to animal shelters to be euthanized it will end up costing tax payers more than letting neutered cats stay in properly maintained colonies. Sadly, some indoor /outdoor pets could inadvertently be destroyed if there is too much haste to eliminate strays/ferals.

I hope you will consult with rescue and animal support organizations who can help you reach a solution which is not cruel and costly.
Sincerely yours, Beverly Houwing

Herbers, Sue

From: Barnett, Gene
Sent: Thursday, December 21, 2006 5:35 PM
To: Herbers, Sue
Cc: Barnett, Gene
Subject: FW: City of Torrance proposed ban on feeding of feral/stray cat colonies including those maintained by TNR

Sue

Here is one I found for Gene

jj

From: Donna Lewis [mailto:dlewis@agfmedia.com]
Sent: Monday, December 11, 2006 11:14 AM
To: TBrewer@torrnet.com; gbarnett@torrnet.com; fscotto@torrnet.com; GDrevno@torrnet.com; hwitkowsky@torrnet.com
Subject: Re: City of Torrance proposed ban on feeding of feral/stray cat colonies including those maintained by TNR

Dear Sirs/Madams,

The problem with the the growing feral/cat colonizes is stupid pet owners who dispose of their pets onto the streets. The colonies that are there now are all fixed.

The ban is a not a solution to the problem. Trapping and euthanizing the feral and stray colonies is extremely time consuming and costly to the taxpayer. If TNR stops feeding the colonies they will all starve to death which is inhumane.

If the ban goes through this will not stop feral colonies. People need to be educated that dumping their pets is WRONG! Keeping the feral/stray colonies as they are proves more effective and does not cost the taxpayers anything.

This is America. We are not China. I would think we are more civilized than killing pets like China.

Donna Lewis

ATTACHMENT #6

ATTACHMENT #6

SMALL ANIMALS

Evaluation of the effect of a long-term trap-neuter-return and adoption program on a free-roaming cat population

Julie K. Levy, DVM, PhD, DACVIM; David W. Gale; Leslie A. Gale, BS

Objective—To evaluate the effect of a long-term trap-neuter-return program, with adoption whenever possible, on the dynamics of a free-roaming cat population.

Design—Observational epidemiologic study.

Animals—155 unowned free-roaming cats.

Procedures—Free-roaming cats residing on a university campus were trapped, neutered, and returned to the environment or adopted over an 11-year period.

Results—During the observation period (January 1991 to April 2002), 75% of the cats were feral, and 25% were socialized. Kittens comprised 56% of the original population. Male cats were slightly more numerous (55%) than females. At the conclusion of the observation period, 47% of the cats had been removed for adoption, 15% remained on site, 15% had disappeared, 11% were euthanatized, 6% had died, and 6% had moved to the surrounding wooded environment. Trapping began in 1991; however, a complete census of cats was not completed until 1996, at which time 68 cats resided on site. At completion of the study in 2002, the population had decreased by 66%, from 68 to 23 cats (of which 22 were feral). No kittens were observed on site after 1995, but additional stray or abandoned cats continued to become resident. New arrivals were neutered or adopted before they could reproduce.

Conclusions and Clinical Relevance—A comprehensive long-term program of neutering followed by adoption or return to the resident colony can result in reduction of free-roaming cat populations in urban areas. (*J Am Vet Med Assoc* 2003;222:42–46)

Populations of unowned free-roaming cats exist throughout the world. Concern about the impact of free-roaming cats on the environment and public health, as well as consideration of the welfare of the cats themselves, has led to various efforts to reduce their numbers. After decades of effort, free-roaming cats have been extirpated from several small, uninhabited islands as a result of intensive control measures, including poisoning, hunting, trapping, and introduction of infectious feline diseases.[1-4] Despite the success of eradication campaigns on geographically isolated islands, logistic barriers and opposition from resident citizens often make application of such strategies to populated mainland territories unfeasible.[5-10] Cat control programs in populated areas must incorporate safety considerations for nontarget animals and humans, be affordable for participating municipal agencies or charitable organizations, include plans to curtail continuous cat immigration and reproduction, and be aesthetically acceptable to the public.[7]

The number of unowned free-roaming cats in the United States is unknown, but is suspected to rival that of pet cats (73 million in 2000) and to contribute substantially to cat overpopulation.[11-14] The free-roaming cat population consists of both socialized stray cats and unsocialized feral cats. Individual cats may have a variety of lifestyles during their lives, including owned pet, stray, and feral status. Because of the vast overlap of lifestyle and socialization status continuums, it is difficult to define discrete populations of free-roaming cats.[15]

Considerable controversy surrounds methods for controlling free-roaming cats, particularly identification of the option that is most practical, effective, and humane. Trap-neuter-return (TNR) programs are intended to halt reproduction without causing harm to the cats.[7,10,16-18] In this approach, cats are trapped, neutered, returned to the site of capture, and released. Veterinarians are central to the process, because they perform the surgeries and are frequently asked to consult on issues of health and welfare of free-roaming cats. The concept of TNR as a humane method for cat population control is endorsed by the AVMA[19] and many humane organizations.[10] More than 1,000 veterinary members of the California Veterinary Medical Association neutered more than 170,000 cats between July 1999 and May 2002 in a $12 million project funded by Maddie's Fund. However, virtually no information exists to support the contention that neutering is an effective long-term method for controlling free-roaming cat populations.

The purpose of the study reported here was to evaluate the effect of a TNR program on a free-roaming cat population. The site of the study was a university campus on which several cat colonies had become established soon after inception in the late 1960s; typically, the colonies formed around food services and student dormitories. Periodically, cats were trapped for euthanasia when cat populations increased to nuisance levels. Beginning in 1991, university employees and students developed a program to capture cats for neutering, followed by return to the colony or adoption. For the purposes of this study, the term free-roaming refers to unowned cats of feral or socialized status.

Materials and Methods

Location—The University of Central Florida occupies 1,415 acres; approximately one-third of the campus site, especially the outer perimeter, is heavily wooded. The cam-

From the Department of Small Animal Clinical Sciences, College of Veterinary Medicine, University of Florida, Gainesville, FL 32610 (Levy); and Friends of Campus Cats, University of Central Florida, Orlando, FL 32816 (D. Gale, L. Gale).

Address correspondence to Dr. Levy.

pus population comprises over 38,000 students and employees; resident students are not allowed to keep pets. On-site construction frequently affects the availability of cat habitats.

Data collection—Beginning in 1991, volunteers began an organized effort to capture free-roaming cats on campus for neutering and to keep records of cat sightings and human interventions. Additional colonies were added to the control program as they were discovered. Cats were recorded as kittens if they were believed to be ≤ 6 months of age. Cats were classified as feral if they avoided human contact. The distinction between feral and socialized cats was imprecise because some cats became more tame with time, and some cats were friendly only toward their feeders and not toward other humans. The socialization status of cats was recorded only at the time of first appearance and was not revised to reflect changes over time. By 1996, all cats on campus were identified and cataloged, including photographs and written descriptions of each cat, socialization status (feral vs socialized), colony affiliations, and final outcomes. Data from the daily observation logs were condensed into quarterly reports. These reports were reviewed retrospectively for the period from January 1991 to April 2002.

Cat care program—Free-roaming cats were trapped by members of the Friends of Campus Cats volunteer organization and transported to veterinarians in private practice or Orange County Animal Services for neutering. Cats were vaccinated against panleukopenia, calicivirus infection, rhinotracheitis, and rabies. The tip of an ear was removed or notched to identify neutered cats. Selected cats, primarily those that appeared ill or those that were mature males, were tested for FeLV and FIV. Cats with positive test results were euthanatized. Following neutering, most cats were returned to their trapping site and released. Many cats, especially kittens and socialized adults, were eventually removed for adoption, but this often occurred long after neutering and return to the colony. Most socialized cats were transferred to other local rescue organizations for adoption, but some cats were adopted by campus employees and students. Cats found their own shelter, often under buildings. Cat food was provided every day by volunteers. Feeding stations were placed to avoid drawing human attention to the cat colonies; food dishes were placed in small moats to prevent insect infestation. Amounts of food provided were adjusted to prevent accumulation of excessive leftovers that might attract wildlife. Injured or ill cats were recaptured for veterinary attention or euthanasia.

Statistical analyses—Descriptive statistics were calculated for data regarding population variables.

Results

Cats—One hundred fifty-five cats were recorded on the campus during the reporting period; these included 116 unsocialized feral cats and 39 cats that were socialized at the time of first appearance (Table 1). Of the feral cats, 58% were kittens; most (69%) of the socialized cats were adults. Fifty-five percent of the 155 cats were males. Only 7 (5%) cats were neutered at the time of initial capture, including 5 socialized adults, 1 socialized kitten, and 1 feral adult.

Cat colonies—Colonies were defined as a feeding area and shelter frequented by an apparently stable population of cats. Eleven discrete cat colonies were identified. In most instances, cats were initially attracted by a readily available food source and then deliberate feeding ensued. Two of the colonies were located near university food service areas, 3 near dormitories, 5 near academic or administrative buildings, and 1 in a parking garage. The cats typically found their own shelter, usually beneath buildings or trailers. The maximum number of cats in each of the 11 colonies ranged from 3 to 25. During the reporting period, all colonies had reductions in numbers of cats so that the size of colonies at the end of the study ranged from 1 to 5 cats; cats were removed for adoption, disappeared, euthanatized, died, or moved to the surrounding wooded environment (Table 2).

All cats did not remain in the same colony throughout the reporting period. Of the 155 cats, 24 moved locations at least once, 17 spent time in other colonies, 11 roamed without a fixed colony, and 10 moved to the perimeter woods where they were not regularly observed. Of the 24 cats that moved between locations, 14 (58%) were males; this finding was similar to the proportion of males overall. Some cats moved locations on 2 or 3 occasions, often after long periods of residence at a single location; median time spent in the original location was 3.0 years (range, 0.1 to 6.0 years). Subsequently, cats spent a median of 3.3 years (range, 0.2 to 5.8 years) in a second site (n = 24 cats), 1.3 years (range, 0.3 to 2.6 years) in a third location (6), and 1.5 years in a fourth location (1). For example, 1 male cat was first observed as a feral kitten in August 1993. The cat was castrated in January 1994 and then returned to its colony, where it remained for

Table 1—Characteristics of 155 free-roaming cats at inclusion in a trap-neuter-return and adoption population control program

Variable	Feral cats	Socialized cats	Total
No.	116	39	155
Age			
Kittens	75	12	87
Adults	41	27	68
Sex			
Male	67	18	85
Female	49	21	70

Table 2—Disposition of 155 free-roaming cats included in a trap-neuter-return and adoption population control program

		Sex		Original socialization status		Age group at disposition		Duration on campus (y)		
Dispostion	No. of cats (%)	Male	Female	Feral	Socialized	Kitten	Adult	Mean ± SD	Median	Range
Remaining	23 (15%)	11	12	22	1	0	23	6.7 ± 2.2	6.8	1.3–11.5
Adopted	73 (47%)	35	38	42	31	22	51	1.6 ± 2.3	0.4	0–10.5
To woods	9 (6%)	6	3	9	0	0	9	0.6 ± 0.9	0.1	0–2.2
Disappeared	23 (15%)	15	8	22	1	0	23	3.3 ± 2.1	2.9	0.4–7.5
Died	10 (6%)	4	6	10	0	0	10	4.6 ± 2.4	4.7	0.3–8.3
Euthanatized	17 (11%)	14	3	11	6	0	17	3.0 ± 2.7	2.9	0–8.5
Total	155	85	70	116	39	22	133	2.9 ± 2.9	2.0	0–11.5

3.4 years until its shelter was demolished during construction in June 1997. The cat then roamed without a fixed colony for 2.3 years until September 1999 when it joined a second colony for 1.3 years. None of the cats in the second colony had shared the original colony with this cat. Finally, in January 2001, the cat again roamed without a fixed colony throughout the remainder of the reporting period (1.2 years). Overall, this cat spent 8.3 years in 2 different colonies with 2 extended periods of roaming without a fixed colony.

Three of the 11 colonies were eventually depleted of cats. In 1 colony, the cats' shelter was demolished to make way for construction of new dormitories. Of the 6 cats residing in the colony at the time of demolition, 1 was adopted immediately, 1 was not observed again, 2 immediately joined other colonies, 1 joined another colony after roaming for 2 years, and 1 was adopted after roaming without a fixed colony for 2 years. All 3 cats that relocated selected different colonies to join. Two colonies gradually decreased in size because of attrition and relocation of members to other colonies; eventually, these were depleted as the last members were adopted. Despite the presence of cats for 7 to 9 years before the colonies were disbanded and the ongoing availability of food, these colonies have not been reestablished by new arrivals.

Ten cats relocated to the perimeter woods where they were not regularly observed. Nine of these remained in the woods. One cat had been in its colony for 1.1 years but moved into the woods for 3.9 years; on return to the main campus area, this cat joined a different colony for an additional 1.1 years before it disappeared.

Adoptions—Nearly half (47%) of the 155 cats were adopted, including 70% (19/27) of the socialized adults and all 12 of the socialized kittens. In addition, 9 of 41 (22%) feral adults and 33 of 75 (44%) feral kittens were adopted. Socialized kittens and cats were more likely to be adopted soon after their capture and neutering than were feral cats. All but 1 of the 12 socialized kittens were adopted within 4 months of arrival, and 12 of the 19 socialized adults were adopted within 4 months. The other 8 socialized cats remained on site for a median of 3.2 years (range, 0.5 to 5.8 years) before being adopted. Within 4 months of arrival on site, 11 of 33 feral kittens and 2 of 9 feral adults were adopted. The other 29 feral cats remained on site a median of 2.4 years (range, 0.4 to 10.5 years) before adoption. One female feral cat was observed on site for several years prior to the recording period and was adopted after 10.5 years in the study, at the estimated age of at least 14 years.

Deaths and disappearances—Ten cats (6% of the population) were found dead during the reporting period. In 6 cats, death was attributed to automobile trauma. Cause of death was unknown in the other 4 cats.

Severe illnesses, including neoplasia (n = 2), injury (1), and unspecified diseases (3) resulted in the euthanasia of 6 cats (4%). Eleven (7%) cats without outward evidence of illness were euthanatized because of positive test results for FeLV or FIV. Euthanasia performed solely on the basis of positive FeLV or FIV test results occurred equally among feral and socialized cats and frequently after several years of residence. It was not possible to evaluate the actual [illegible] these viral diseases, because only cats for [illegible] was a strong index of suspicion were tested.

Twenty-three (15%) cats were lost to follow up and all but 1 of these cats were feral. One feral cat escaped during transportation for neutering; it is not known whether the other cats died, relocated to other areas, or were adopted without the knowledge of the study volunteers.

Deaths, euthanasias, and disappearances often occurred after cats had resided on site for several years. Deaths occurred following a median of 4.7 years (range, 0 to 8.3 years), euthanasias of debilitated cats after a median of 5.1 years (range, 0.1 to 8.5 years), euthanasias of cats with positive test results for FeLV or FIV after a median of 2.1 years (range, 0 to 5.8 years), and losses to follow up after a median of 2.9 years (range, 0.4 to 7.5 years).

Impact on the cat population—Although the neutering and adoption program had been in effect since 1991, a complete census of cats was not completed until 1996. At that time, 68 cats were recorded in residence, and all but 1 male feral cat were neutered. The total number of cats present at the end of the reporting period 6 years later was 23, representing a 66% reduction in the cat population from the original census. Of those remaining cats, only 1 was a socialized adult, and the others were adult feral cats; 11 males and 12 females remained. No kittens were observed on site after 1995. Median duration on site for the cats present at the end of the reporting period was 6.8 years (range, 1.3 to 11.5 years).

Discussion

Before the initiation of a TNR program with adoption, free-roaming cats were considered by campus authorities to constitute a nuisance. Periodic trap and removal efforts were made when excessive cat numbers prompted complaints about on-site noise and odor. Campus employees and residents contributed to these problems by offering large amounts of cat food in public locations, attracting not only more cats but also wildlife such as raccoons and opossums and pests including cockroaches and ants. Although records were not kept prior to 1991, observers estimated that the campus cat population might have reached 120 cats. A group of students attempted to reduce the number of resident cats by removing approximately 50 kittens for adoption, and approximately 8 adult cats were neutered and returned to campus. However, the control effort was not sustained, and the cat population again increased.

The TNR program instituted in 1991 incorporated neutering, euthanasia of sick animals, and adoption of socialized cats and feral cats that eventually became tame enough to become pets. With the exception of 1 male cat, all original study cats were neutered between 1991 and 1995, and no kittens were known to be born on campus after 1995. As a result of deaths, disappearances, and adoptions, the known maximum cat popu-

lation (68 cats in 1996) gradually decreased to 23 cats, the lowest number for the entire recording period.

A majority (57%) of the cats entered the project as kittens, and most of those were feral cats born on site. Feral cats were most numerous, comprising 75% of the population. Male cats comprised 55% of the population. Several studies have revealed that males equal[20] or outnumber[9,21,22] females in free-roaming cat populations, although majorities[9] of females have also been reported. In contrast, female cats are reported to comprise a slight majority (55 to 58%) of cats neutered in 2 large TNR programs, which together have neutered more than 20,000 cats.[18] It is possible that female cats are more easily trapped or that cat caretakers preferentially target females for neutering.

Adoptions accounted for a substantial portion of the decrease in the cat population, even among feral cats. It has been reported[5,6,10,23,24] that feral cats become less aggressive toward each other and more friendly toward their feeders following neutering, and this may have encouraged adoption of previously feral cats. Cats were often transferred to private homes only after several years of free-roaming status. The permanent placement of cats in homes is consistent with conventional animal welfare values; the more traditional pet lifestyle is considered to meet the needs of domesticated pet species better than a homeless and free-roaming existence.[7]

Despite widespread concern about the welfare of free-roaming cats, many of the animals in our study survived for a number of years. Most cats (83%) still remaining on site at the end of the observation period had been present for > 6 years. This compares favorably with the mean lifespan of 7.1 years reported for pet cats,[25] particularly as almost half of the cats in our study were first observed as adults of unknown age. Most cats (61%) that disappeared, died, or were euthanatized for debilitating conditions had been present for at least 3 years. In general, the cats were in adequate physical condition, and only 4% were euthanatized for humane reasons. Previous studies[26,27] found no significant differences in body weights of free-roaming cats, compared with pets; commonly, free-roaming cats were in adequate body condition.[24,28,29] Neutering of free-roaming cats results in increased weight and body condition, similar to that observed following neutering of owned cats.[24]

The program enhanced the welfare of cats by preventing the birth of kittens. Virtually no information exists concerning survival of free-roaming kittens, but death rate is expected to be high in this age group. It is proposed that a mortality rate of > 50% in free-roaming kittens prior to maturity contributes to the relatively stable population of cats.[3,21,30-33] Free-roaming female cats produce 1.1 to 2.1 litters of 3.6 to 5.0 kittens/y[4,18,21,34]; in the population of 70 female cats of this report, the birth rate would therefore be 277 to 735 kittens/y, and most would die before adulthood.

Multiple studies[26,35-39,a] have confirmed that the provision of food for free-roaming cats is a widespread activity involving 9 to 22% of households. Several studies[5,7,10,16,32,35,40,41] have also documented the intense human-animal bond that forms between cat feeders and free-roaming cats, even if the cats are too wild to be approached. Attempts to control populations by removal of cats are often met with opposition and sabotage by cat feeders who have formed an attachment to the cats; in our study, employees and students openly violated policies against feeding the cats and interfered with trapping efforts by university officials during removal campaigns. In contrast, programs that control the population and improve the well-being of cats via neutering frequently have the support of cat feeders who may be recruited to assist with trapping and management.[5,6,10,16,18] Several TNR programs to control individual colonies of cats have been reported.[5,6,8,9] In a TNR program to control a population of 41 free-roaming cats at a research and hospital facility, researchers gained the cooperation of patients with assurances that cats would be returned after neutering.[6] Forty of the cats were returned, and 1 was euthanatized because of advanced illness. Three years later, 30 of the original cats remained and 6 new cats had joined the colony, resulting in a slight decrease in colony size. A series of 254 cats in multiple small colonies were neutered at various British locations in the 1970s and 1980s[9]; after 5 years, 21% of the cats were adopted, and 70% of the cats that were returned to the colonies remained. In another long-term study,[32] TNR was used to control a colony of cats residing in abandoned garages in London. The original colony size of 20 cats remained relatively stable, primarily because the number of immigrants into the colony was nearly balanced by deaths during the 5-year study period. Only 1 litter of kittens was born during the study. At the end of the study, 17 cats were present, and complaints about the cats were virtually eliminated. These studies concluded that TNR results in stabilization or modest reduction of colony size, reduced cat turnover, and healthier cats.

Failures of TNR to control cat colonies also exist. A 1-year study[b] of TNR programs in 2 southern Florida parks revealed that the presence of well-fed cat colonies encouraged illegal abandonment of additional cats. While the original population of 81 cats declined 20% during 1 year, the arrival of new cats prevented reduction of the colonies, and 88 cats were present at the end of the study. Results of the study also refuted an oft-cited claim that an established colony of cats will defend its territory and prevent the immigration of new arrivals. Minimal territorial activity by the cats was observed, and aggressive encounters between cats were usually limited to enforcement of feeding order. In our study, placement of feeding stations in discrete locations minimized public awareness of the cat colonies. Sexually intact socialized cats that were apparently abandoned joined the colonies; their presence could have undermined the control program had they not been promptly captured and neutered. Migration of cats between colonies was common, and resident cats did not always prevent the immigration of new members.

The results of our study indicated that long-term reduction of free-roaming cat numbers is feasible by TNR. However, natural attrition of cats would be expected to result in a slow rate of population decline. Implementation of an aggressive program of adoption for socialized cats accelerates that decline. Immigration

or abandonment of new cats may be a frequent event, and free-roaming cats do not appear to have sufficient territorial activity to prevent new arrivals from permanently joining colonies. These new arrivals could substantially limit the success of TNR if an ongoing surveillance and maintenance program is not effective.

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Implementation of a Feral Cat Management Program on a University Campus

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In August 1998, Texas A&M University implemented on campus a trap-test-vaccinate-alter-return-monitor (TTVARM) program to manage the feral cat population. TTVARM is an internationally recognized term for trapping and neutering programs aimed at management of feral cat populations. In this article we summarize results of the program for the period August 1998 to July 2000. In surgery laboratories, senior veterinary students examined cats that were humanely trapped once a month and tested them for feline leukemia and feline immunodeficiency virus infections, vaccinated, and surgically neutered them. They euthanized cats testing positive for either infectious disease. Volunteers provided food and observed the cats that were returned to their capture sites on campus and maintained in managed colonies. The program placed kittens and tame cats for adoption; cats totaled 158. Of the majority of 158 captured cats, there were less kittens caught in Year 2 than in Year 1. The proportion of tame cats trapped was significantly greater in Year 2 than in Year 1. The prevalence found for feline leukemia and feline immunodeficiency virus ELISA test positives was 5.8% and 6.5%, respectively. Following surgery, 101 cats returned to campus. The project recaptured, retested, and revaccinated more than one-fourth of the cats due for their annual vaccinations. The program placed 32 kittens, juveniles, and tame adults for adoption. The number of cat complaints received by the university's pest control service decreased from Year 1 to Year 2.

Feral cats are a concern in the United States and around the world. Concerns center around issues of public health, cat welfare, impacts on wildlife, and meth-

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ods for controlling these populations (Mahlow & Slater, 1996; Patronek, 1998). The term *feral* is used to denote a spectrum of behavior in cats, representing varying levels of socialization dependent on the cat's history and experiences (Patronek, 1998). Although some of these cats previously may have been animal companions, in general they are too unsocialized to be placed as pets. Thus, there is controversy over how to control these populations.

A population of cats has existed on the Texas A&M University campus for many years. The campus is in a community of approximately 100,000 and has an enrollment of more than 44,000 students (Texas A&M University, 2001). The campus is near the edge of town, adjacent to pastures as well as residential areas; thus, the campus cat population is contiguous with the cat population in the community. The campus group is thought to have developed from pet cats abandoned or lost by students and neighbors. Thus, the population consists of cats born feral from nonneutered former pets as well as cats who have been lost or abandoned more recently.

Because of concerns associated with these cats, the university has attempted to control this population and historically has done so through traditional pest control measures: trapping and euthanasia. In response to concerns from some faculty and staff that these methods were not effective and that other more effective and humane methods existed, an alternative approach was proposed and implemented. This alternative method was aimed at management of the population rather than pest control and was implemented in the summer of 1998. The method, known as trap-test-vaccinate-alter-return-monitor (TTVARM), strives to control population growth through neutering and maintaining the cats at their original site in managed colonies where food is provided and the cats are observed (Patronek, 1998). Proponents of this method believe that maintaining the cats at the original location will keep the environmental niche filled and help prevent immigration of new cats (Universities Federation for Animal Welfare [UFAW], 1995).

In contrast, when trapping and euthanasia are employed, a few cats often escape capture and will repopulate the area—as long as food and shelter are available (Mahlow & Slater, 1996; UFAW, 1995). A few studies of the implementation of this type of program on small populations of feral cats have been carried out and have found the populations to remain relatively stable with no new kittens being produced (Neville & Remfry, 1984; Zaunbrecher & Smith, 1993). Although reducing reproduction in the population, TTVARM programs, it is believed, improve the health of feral cats and reduce the public health risks and risks to free-roaming pet cats because the ferals are vaccinated for rabies and feline infectious diseases at the time of neutering. Neutering also alters certain behaviors, making cats less likely to roam, spray, and fight (Mahlow & Slater, 1996), further lessening the risk of spreading disease as well as decreasing nuisance complaints. Thus, the campus program's goal was to manage the population more humanely

through nonlethal measures by reducing growth through neutering while reducing complaints associated with these cats.

METHODS

Trapping

A TTVARM program began on the university campus in August 1998. Trapping was carried out approximately every 4 to 6 weeks from August 1998 through July 2000, except in December. The December 1998 trapping session was conducted 2 weeks after the November period, and the December 1999 session was cancelled because of the senior veterinary students' taking their national board exams.

Typically, trapping occurred for 4 to 6 nights (range 2 to 8). Humane live traps (Raccoon–Opossum Transfer Trap and XL Raccoon Transfer Trap, Tomahawk Live Trap Co., Tomahawk, WI) were used to trap the cats. Generally, 10 to 20 traps per night were set (range 3 to 25). The minimum number set in any trapping period was approximately 30 traps, as the minimum number of traps per night and the minimum number of nights per trapping period never occurred in combination. Trap numbers were reduced toward the end of a period or if it was raining, as cats were unlikely to be caught under these conditions. Increased numbers were set during the winter and spring breaks because the campus was less active at these times. Traps were set in areas known or suspected to have cats and were placed in less conspicuous sites, so as to be less visible to passers-by.

Various baits and trapping methods were used in an attempt to maximize trapping success. Canned cat food, tuna, and dry cat food were used most often, but other foods such as hot dogs and sardines were also tried. Covering traps with tarps or plastic garbage bags was also done periodically, either for protection from rain or in an attempt to alter the trap's appearance to encourage trap-shy cats to enter. Other variations in trapping methods included covering the wire mesh floor of the trap with newspaper and using a wooden box trap. Feeding out of a trap, without setting the trap, was also tried. This feeding method was carried out for a few days to a few weeks before the trap was set. Traps were placed in the evening and, to reduce interaction between people and trapped cats, typically were checked early in the morning. Cats caught were transferred to a holding area in the Small Animal Clinic of the Veterinary Teaching Hospital.

The cats were kept in specially modified cages, which allowed for feeding and cleaning the cats without handling them. The floors of the cages were slotted to allow waste to drop through into a tray that could be removed for cleaning. The doors of the cages, although able to open in a standard manner, also had a guillotine door. This feature allowed caretakers to maneuver bowls and litter trays into

and out of the cages while reducing the risk of escape. The cages also contained a squeeze feature.

Data Collection and Analysis

At the time of initial capture, each cat was assigned an identification number. An individual record was made for each cat, using data sheets developed for recording the cat's identification and health information. Breed and estimated age were recorded at this time, along with weight, coat color, and a physical description. Age estimates were based on size, body weight, and dentition, with one veterinarian making the majority of the estimates. Gender was determined after the cat had been anesthetized for the surgery lab. Information regarding feline leukemia (FeLV)/feline immunodeficiency virus (FIV) status, vaccination information, and microchip number was recorded on each cat's data sheet. Occasionally, tame cats were trapped or found, in which case gender was determined during routine physical examination. To provide an age distribution of the population, age categories were defined as follows: kitten (< 3 months); juvenile (3 months to 1 year); young adult (1 year to 5 years); adult (5 to 10 years); geriatric (> 10 years). Cats then were placed into categories based on their estimated ages.

Blood samples were taken from each cat either when anesthetized for the surgery laboratory or during physical examination if the cat was tame. Using a commercial ELISA test (Snap® FeLV Antigen and FIV Antibody Combo Test, IDEXX Laboratories, Inc., Westbrook, ME), samples were tested for FeLV and FIV. The prevalence found in Year 1 and Year 2 was compared by Fisher's exact test, as was the prevalence found in ferals and tame cats.

The number of cats caught in Year 1 of the program was computed and compared to the number caught in Year 2. The proportion of males and females caught in each year was analyzed by chi-square. The difference in proportion of kittens caught in each year also was analyzed. In addition, the number of kittens caught in the first year was divided by season and analyzed by chi-square. The number of tame cats caught in each year that were estimated to be at least 6 months old, was totaled and analyzed using Fisher's exact test. The number of cats returned to campus and later recaptured for annual vaccination was compared to the total number returned and due for vaccination. The weights of those cats recaptured for annual vaccination that were estimated to be at least 1 year of age at the time of neutering, were compared to their weights at neutering, using the Wilcoxon signed rank test.

Initially, any cat involved in a bite incident was euthanized and submitted for rabies testing. The decision to euthanize these cats, rather than quarantine them, was made because of concerns of the college's Hospital Research Review Committee, which oversees research programs on nonuniversity owned animals. The policy was amended in the latter part of Year 2 to allow for quarantine on a case-by-case basis.

The number of complaints received by the university's pest control service for cats was tabulated for the period January 1999 through July 2000. Approximate totals for costs of surgeries and traps were tabulated. Number of person hours was estimated for time spent feeding, monitoring, trapping, and conducting surgeries.

Surgery Laboratories

On the Friday at the end of each trapping session, surgery laboratories were conducted. In the laboratories, the cats were anesthetized; given physical examinations; tested for FeLV and FIV; and, if negative, vaccinated for rabies, feline panleukopenia, feline rhinotracheitis, calicivirus, and, occasionally, leukemia—depending on which combination vaccine was used (Imrab™ 3, Merial, Inc., Athens, GA; Eclipse™ 3+ FeLV/R, Fort Dodge Laboratories, Inc., Fort Dodge, IA; Trivalent Intranasal and Intraocular Vaccine, Boehringer Ingelheim Animal Health, Inc., St. Joseph, MO). Microchips were implanted (FriendChip™, AVID™, Norco, CA) and cats were surgically neutered, using accepted techniques (Fossum et al., 1997). Kittens were neutered if they were estimated to be at least 8 weeks old, based on a minimum body weight of 0.9 kg (Howe, 1997; Theran, 1993). After the cats were neutered, they were ear-tipped for identification as neutered feral cats (Cuffe, Eachus, Jackson, Neville, & Remfry, 1983). The ear-tipping procedure consisted of removing approximately 1 cm from the tip of the pinna by a straight cut after crushing with a hemostat. Styptic sticks were used if needed to control bleeding (Stypt-Stix, Vetus Animal Health, Burns Veterinary Supply, Rockville Centre, NY). The left ear tip was removed in females and in males, the right. Cats that tested positive for FeLV or FIV were euthanized. These cats were submitted for necropsy beginning in the fourth month of the program. Blood samples were collected from FIV+ cats for potential testing of viral status postmortem, through viral isolation, as part of another study.

Senior veterinary students, as part of their clinical rotations, performed the laboratory procedures. To prepare the students, handouts describing the protocol were provided prior to the laboratory. A veterinary technician supervised the students in drawing blood, placing intravenous catheters and endotracheal tubes, and clipping and preparing the cats for surgery. A veterinary surgeon supervised the surgical and ear-tipping procedures. Cats were returned to their site of capture approximately 2 days following surgery.

Management

Tame cats and kittens young enough to be socialized were placed for adoption. An estimated age of 3 months was generally the maximum age at which socialization of kittens was attempted. Tame cats were held for 3 days and, in an attempt to locate the owner, were listed with the local animal shelter, in the lost

and found section of the local paper, and with the front desk of the Small Animal Clinic. Like the ferals, unclaimed cats were tested, vaccinated, microchipped, and neutered. They then were placed for adoption. Previously feral cats that later became socialized also were placed for adoption.

A volunteer organization, limited to faculty, staff, and students, acted as caretakers of the managed colonies. Returned cats were fed at feeding stations set up around campus that, subject to the availability of volunteers, were replenished daily. Volunteers also observed for the presence of new or ill cats.

Periodically, cats were caught between scheduled trapping, in which case the cat was worked into the general surgery service's schedule and was tested, vaccinated, microchipped, neutered, and ear-tipped as during the laboratories.

RESULTS

From August 1998 through July 2000, a total of 158 cats were caught on campus. Most of these were caught in traps, but some, such as kittens and tame cats, were occasionally caught by hand. The number of cats caught in Year 1 was summarized for comparison to the number captured in Year 2 (Table 1). Although a greater proportion of males was caught in Year 2 than in Year 1, there was no association between gender and year, $\chi^2(1, N = 158) = 1.47, p = .22$. Although 20 kittens were caught in Year 1, only 3 kittens were caught in Year 2. The proportion of kittens caught in Year 2 was less than the proportion of kittens caught in Year 1 but was not statistically significant ($p_1 - p_2 = .08, p = .39$). It was thought unlikely that the 3 kittens in Year 2 were born on campus, as they were found in unusual locations and found as single kittens with no littermates.

Excluding these kittens from the analysis, the proportion of kittens captured in Year 2 was significantly less than the proportion in Year 1 ($p_1 - p_2 = .16, p = .02$). In Year 1, a significantly greater proportion of kittens was captured in the fall than in any other season, $\chi^2(3, N = 123) = 10.06, p = .02$. The prevalence of cats testing positive for FeLV and FIV was calculated (Table 1). This calculation was based on the testing of 155 cats. Three cats were not tested for the following reasons: One was euthanized for rabies testing as the result of a bite incident, one was a kitten found dead, and the third was a tame cat found bearing identification and was returned to the owner. The kitten found dead was not captured in a trap but was found in the mud next to a drainpipe and was presumed to have drowned. Although the prevalence of both FIV and FeLV decreased in Year 2, this was not statistically significant ($p_{FIV} > .99$; $p_{FeLV} = .46$). Two of the FIV+ cats had their viral status tested postmortem and both were confirmed positive. Of the 20 cats testing positive for FeLV or FIV, there was 1 FIV+ tame cat, but the difference in prevalence between ferals and tame cats was not statistically significant ($p_{FeLV} = .38$; $p_{FIV} > .99$). The majority of FeLV+ cats were estimated to be kittens or juveniles (67%).

TABLE 1
Comparison of Population Demographics and Outcomes for Years 1 and 2

	Year					
	1		*2*		*Total*	
	N	%	*N*	%	*N*	%
Total caught	123		35		158	
Males	56	46	20	57	76	48
Females	67	54	15	43	82	52
Ages						
Kitten[a]	20	16	3	9	23	15
Juvenile[b]	16	13	9	26	25	16
Young adult[c]	76	62	20	57	96	61
Adult[d]	10	9	3	9	13	8
Geriatric[e]	1	1	0	0	1	1
Outcomes						
Returned to campus	85	69	16	46	101	64
Died (after returned)	1		5		6	
Returned to owner	1	1	0	0	1	1
Adopted	16	13	16	46	32	20
Found dead (not caught)	1	1	0	0	1	1
Euthanized	20	16	3	9	23	15
Total tested	120		35		155	
FIV+	8	6.7	2	5.7	10	6.5
FeLV+	8	6.7	1	2.9	9	5.8
FeLV+/FIV+	1	0.8	0	0	1	0.6
Bite incidents	3		0		3	
Quarantined	0		1		1	

[a]Less than 3 months old. [b]3 months to 1 year. [c]1 year to 5 years. [d]5 years to 10 years. [e]More than 10 years.

while the majority of FIV+ cats were young adults (70%). The one cat testing positive for both FeLV and FIV was a young adult. Three feral cats were involved in bite incidents and were euthanized. All tested negative for rabies. A fourth bite incident occurred involving a socialized kitten. The kitten was quarantined and released from quarantine at the end of 10 days.

The majority of the FeLV+ and FIV+ cats were clinically normal on physical exam. One FeLV+ cat was clinically ill. This was a kitten with flea anemia. Another FeLV+ cat had a small mass on the lip but otherwise was clinically normal. Three of the FIV+ cats had abnormal physical exam findings. One cat had facial dermatitis, one had ocular discharge and a swelling ventral to the eye, and the third cat had diarrhea and an upper respiratory infection. Necropsy results were available on 12 of these cats, as 6 were euthanized before necropsies were begun and re-

ports were not found for 2 cats submitted for necropsy. Two of the FIV+ cats and one FeLV+ cat had no significant lesions at necropsy. One FIV+ cat had diarrhea clinically and only intestinal parasites found at necropsy. It was speculated that the diarrhea may have been associated with the FIV+ status. Among the FIV+ cats, one cat was diagnosed at necropsy with chronic fibrosing pancreatitis and one with pulmonary edema. In the cat with pancreatitis, other findings were intestinal parasites, chronic enteritis, hepatitis and nephritis, alveolar edema, cystic rete ovarii, and thrombus of the uterine vein.

Although these other findings were mild and not considered clinically significant, it was thought that the presence of such a variety of lesions may have been associated with FIV. In the cat diagnosed with pulmonary edema, other findings that were not considered clinically significant were intestinal parasites, mild hepatocellular lipidosis and hydropic degeneration, mild focal portal hepatitis, mild to moderate villus blunting of the small intestine, focal nephritis and lymphoid hyperplasia, and follicular lymphoid depletion. Another FIV+ cat had a fibrotic lesion on the splenic capsule, possibly due to a previous trauma, intestinal parasites, and a healing skin abrasion. Of the FeLV+ cats, one had hydrothorax and atelectasis, but these were not considered clinically significant and no other lesions were found. At necropsy, one FeLV+ cat had intestinal lymphoid hyperplasia, associated with parasitism, and cystic rete ovarii; another had diffuse mild lymphoid depletion of the white pulp in the spleen, mild enteritis, and intestinal parasites. The lymphoid depletion was speculated to be related to the FeLV+ status. One FeLV+ cat was diagnosed with hypertrophic cardiomyopathy at necropsy, whereas another was diagnosed at necropsy with severe infestation of intestinal parasites, a hepatic hematoma, and myelo-erythroid hyperplasia of the bone marrow, which may have been related to the FeLV+ status. The one cat who was FeLV+ and FIV+ had lymphadenopathy and lymphoid hyperplasia, which was thought to be associated with the FIV+ status as well as focal hepatocyte necrosis and telangiectasia.

The total number of cats and kittens caught for Years 1 and 2 is summarized on a month by month basis (Figure 1). The proportion of new tame cats caught in Year 2 (10:35) was significantly greater than the proportion caught in Year 1 (8:123; $p = .001$). Two cats, that were known and had been fed for a long period by employees, were excluded from all the tame cat analyses. Rather than being placed for adoption, these cats were maintained at their sites, where employees continued to feed them.

The number of cats recaptured that were due as of July 2000 for annual vaccination was compared to the total number of cats returned to campus and due for vaccinations as of that date. A total of 23 cats (29%) out of 80 that were due for annual vaccinations, were recaptured and given their annual vaccinations. All but 3 of these cats were within 3 months of when they were due for vaccinations. Two of the 3 cats were 6 months past due and the third cat was 8 months past due for vaccination. All cats recaptured for their annual vaccinations were retested for FeLV

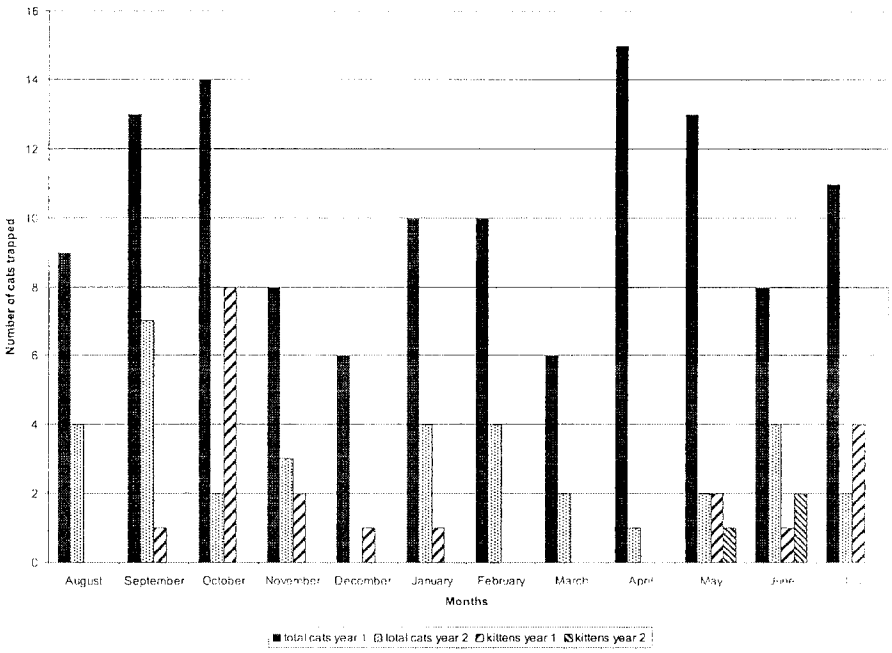

FIGURE 1 Monthly captures Year 1 versus Year 2.

and FIV, and all were negative. Weights at the time of annual vaccination were compared to the weights at neutering for the 17 adult recaptures, with a difference ranging from –0.4 kg to 1.8 kg and a median difference of 0.3 kg. The weights at recapture were significantly greater than the weights at neutering ($p = .01$). Of the 4 cats who lost weight during this time, 1 cat was in late pregnancy at neutering, 1 had been previously spayed, and 1 was a female heavily lactating. The fourth cat was a male who lost 0.4 kg. On physical exam, he was found to have some scars and skin lesions on his head, broken nails, and a broken tooth. Some firm hard masses, presumed to be feces, were palpated in the abdomen, although the possibility of an intestinal foreign body was also considered. No further diagnostics, other than retesting for FeLV and FIV, were performed. As he appeared generally healthy, he was returned to his capture site 2 days following revaccination and has been observed in the area since his return. He was originally captured for neutering in January and recaptured in October.

There was one cardiac arrest during the laboratories. A juvenile arrested while under anesthesia and was resuscitated but was blind following recovery. The cause for the arrest was not identified. As a result of handling for nursing care, he became socialized. He later regained partial vision and was placed for adoption.

A total of 17 kittens and juveniles, plus 15 tame adults were placed for adoption. Of the tame cats caught, only 1 was reunited with the owner. This was the only cat found bearing identification. One case of attempted socialization, which failed, involved a 4–5 month old juvenile who initially seemed amenable to socialization. Over a period of approximately 6 weeks, the cat became gradually less social and was returned to the site of capture.

Of the 158 cats caught, 101 initially were returned to their site of capture a few days following the surgery laboratories. Since their initial return, 9 cats became socialized and were adopted into homes, in addition to the 32 other cats placed for adoption. Six cats were known to have died. Four died as the result of trauma; 1 from disease; and the sixth from unknown cause. Necropsies were performed on 5 of these cats. The body of the 1 whose cause of death was unknown was not recovered. For the 4 cats that died from trauma, necropsy results were consistent with trauma and included broken bones, hemorrhage, fractured liver, brain herniation, and perforation of the thoracic cavity. One of the cats who died from trauma also had concentric hypertrophy of the heart. The cat that died from disease was diagnosed at necropsy with acute encephalitis, enteritis presumed due to panleukopenia infection, and pyelonephritis. Other findings were mild cystitis, oral ulcers, postsurgical focal chronic peritonitis, vacuolar degeneration, sinus plasmacytosis and mild plasmacytic pericholangitis bile stasis of the liver, and plasmacytosis and mild hemosiderosis of the spleen.

For the period from January through July 1999, the university's pest control service reported five instances in which either a complaint about a cat was received or a cat was caught while responding to another complaint. Only three such instances were reported for the period August 1999 through July 2000 (personal communication, Pest Control Supervisor P. Maxwell, August 10, 2001). Reports from 1998 were not available.

The surgical costs of the program were approximately $9,800. The cost to the program was half this amount, based on a 50 % rate reduction charged by the Veterinary Teaching Hospital. The cost for traps was approximately $900. Other traps were borrowed from the university's Department of Wildlife and Fisheries Sciences. Food, FeLV and FIV test kits, vaccines, and microchips were donated. Time spent in person-hours per week was approximately 15 for feeding and monitoring, 25 to 35 for trapping, and 35 for conducting surgeries.

DISCUSSION

The campus program generally has been viewed as a success by the veterinary faculty and the university's pest control service. The numbers of cats and kittens caught on campus have decreased between the first and second years of the program. The three kittens found in Year 2 were unlikely to have been born on

campus, as no littermates or nursing females were seen. Furthermore, each was found in open areas, such as parking lots and dog runs, and was easily picked up rather than being trapped, suggesting that these socialized kittens were either lost or abandoned. Although some of the kittens in Year 1 were caught by hand, most were caught in areas where littermates or nursing females were also caught. As to the variation in captures by season, the month of October—in which a litter of three kittens was captured—may account for the greater proportion of fall captures. All other kittens were found singly or in pairs. No other explanation was found for the increased proportion in fall. Although there was variation in the number of traps set each month, the number of cats caught did not correspond necessarily to the number of traps set. Very few cats were caught in some months, despite a large number of traps being set. Thus, despite the variation in trapping effort, the number of cats caught by month can be compared to see the decreasing trend in the number of new cats captured. The number of traps set was not a rate-limiting step.

Ideally, a population estimate, using the mark-recapture method, would have been performed prior to the program's implementation. However, a critical assumption of this method is that marked and unmarked animals are equally catchable, an assumption that often does not hold true in natural populations (Krebs, 1989). Another method, relying on visual identification of individuals, was not feasible as many of the cats often were seen fleetingly and under conditions—such as at night or from a distance—making exact identification difficult. Given this limitation and the potential difficulty in recapturing cats, and because the program's goal was to neuter as many cats as possible, an initial population estimate was not performed. It cannot be stated definitively that the total number of cats on campus has decreased because the study was not designed to determine this. However, more than one-third of the cats were removed, and the results indicate—based on the decrease in the number of complaints—that those who remain are less of a nuisance than previously they were. The decline in complaints has continued as only one was reported from August 2000 through July 2001 (personal communication, Pest Control Supervisor P. Maxwell, Aug 10, 2001). Although complaint records were not available for the period prior to 1999, it is known that in the year before the program's start, at least nine kittens either were caught by pest control, as they were brought to the veterinary college for euthanasia, or found by university personnel (personal communication, D. Fradkin, AFCAT founder, August 27, 2001). Typically, complaints associated with cats occurred every year.

Although nearly two-thirds of the cats caught in Year 2 were male, the overall population of cats captured on the campus had approximately a 1:1 male to female ratio. The majority of cats were young adults, followed by juveniles and kittens, while only a low percentage were adult or geriatric cats.

The increase in the proportion of tame cats caught during Year 2 may be the result of the same number of tame cats coming in each year or may be the result of

cats from the surrounding neighborhoods replacing cats that were removed from campus as a result of euthanasia and adoption. Such findings have been seen at other sites where similar programs have been implemented. Neville and Remfry (1984) carried out a trap-neuter-return program on a population consisting of two small colonies in Regents Park in London. They found that the population remained relatively stable following neutering, although two males disappeared. Several months following the disappearance of these cats, two other males joined the colony. These cats were subsequently trapped and neutered. The colony was monitored for approximately 6 months after the arrival of these cats; in that time, no other cats immigrated into the group, and there were no new litters of kittens. Another possible source of tame cats could be people abandoning cats on campus. To promote responsible pet ownership, the program provided education on campus through presentations and distribution of brochures.

There is variation among TTVARM programs with regard to the details of implementation, most notably in the decision to test feral cats for FeLV and FIV. Because testing is expensive, many programs opt not to test, preferring to focus their limited resources on neutering as many cats as possible. Another concern over testing, besides cost, is the interpretation of results, particularly if cats testing positive will be euthanized. For this program, the decision to test all cats for FeLV and FIV and to euthanize those testing positive was made for several reasons. First, cost was not a consideration as tests were donated to the program. Second, as this program had an interest in research on feral cats' health, as well as management of the population, testing was desired to estimate the prevalence of these diseases. Furthermore, given that it was not feasible to hold these cats to retest positives at a later time to see if they remained positive or to do further confirmatory testing, it was decided to euthanize all positives. Finally, as this program was being incorporated into the curriculum of a veterinary school, it was important to expose the students to the complete implementation of TTVARM programs so that once they were in practice they could make more informed decisions regarding feral cat health and management.

The three bite incidents involving ferals were the result of human error. One occurred when a university employee, not associated with the program, found a kitten on campus and attempted to pick up the kitten. The second incident occurred when a student reached for a cat who had awakened—an anesthetic hose having come off—just as surgery was starting. In the third incident, a cat recovering from surgery knocked open the cage door; got loose; and, as picked up, bit the person, despite the person's heavy gloves being worn for protection. It was presumed that the cage door had not been latched properly. All three incidents occurred during the first 6 months of the program. Attention to detail was increased in an effort to avoid further incidents. A fourth incident also was due to human error. It occurred late in Year 2 and involved a veterinary student playing with a socialized kitten.

The bite occurred when the kitten became frightened by a dog that got loose. Following quarantine, the kitten was placed for adoption.

Although the initial costs of starting up TTVARM programs can be substantial in terms of money and time, these tend to decrease with time as fewer new cats are caught. Often, people, providing free labor, are willing to donate their time to assist with feeding and trapping. In addition, some of the financial costs can be defrayed through donations. Although the affiliation with a veterinary college aided this program in acquiring donations, other programs can obtain 501(c) 3 nonprofit status (Internal Revenue Service, 2001), which can be beneficial when seeking donations.

At reduced frequency because fewer new cats are being captured, the colonies on campus will continue to be managed through periodic trapping—with feeding and observation continuing as before.

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Management of feral domestic cats in the urban environment of Rome (Italy)

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Abstract

In Italy, which is rabies-free, the national Law No. 281 [Legge Nazionale 14 agosto 1991, No. 281: Legge Quadro in materia di animali di affezione e prevenzione del randagismo. Gazz. Uff. Rep. Ital. no 203 del 30 agosto 1991: p. 3] on the management of pets and on the control of feral cats has introduced the no-kill policy for this species. Thus, "trap-neuter-release" (TNR) programs have been carried out for >10 years. In this paper we present data on registered colonies and censused cats in Rome from 1991 to 2000; the results of the neutering campaign from 1991 to 2000; and a survey, on 103 cat colonies, on the effects of demographic control of urban feral-cat colonies in the city of Rome, carried out by the local Veterinary Public Services (VPS) in collaboration with the associations of cat care-takers. In 10 years almost 8000 were neutered and reintroduced in their original colony. The spay/neuter campaigns brought about a general decrease in cat number but the percentage of cat immigration (due to abandonment and spontaneous arrival) is around 21%. This suggests that all these efforts without an effective

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education of people to control the reproduction of house cats (as a prevention for abandonment) are a waste of money, time and energy.
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Keywords: Cat care-takers; Domestic cat; Veterinary Public Services; Urban environment

1. Introduction

The debate about the no-kill policy is a topical subject in feral-cat population management.

In Italy, the promulgation in 1991 of national Law No. 281 on the management of pets and on the control of stray dogs and feral cats has introduced the no-kill policy for both species. The crucial points of Law No. 281 (1991) concerning the management of feral cats are:

1. Feral cats have the right to live free; they are protected and cannot be moved from their colony.[1]
2. Feral cats have to be surgically neutered by the local Veterinary Public Services (VPS) and reintroduced in their colony.
3. Cat care-takers (known also as "cat-lovers") become an institutionalised figure. Colony care-takers are gathered in associations; they can have the official assignment of the management of a cat colony if the local VPS and the office for the animal welfare agree. Management modalities are defined at the local level.

Cats are currently classified as feral when they can range freely and are not closely attached to a particularly household (Passanisi and Macdonald, 1990) and/or if they avoid human contact (Levy et al., 2003).

Among western countries Italy, that is rabies-free (Prosperi, 1974), represents the only example were the "no-kill" policy has been applied by law for >10 years. Killing the feral cats has been illegal since 1991 (since 1988 for Rome and Latium Region, following the Regional Law No. 63 (1988), now substituted by the Regional Law No. 34 (1997)). Instead, trap-neuter-release (TNR) programs have been used. TNR programs are considered the most practical, effective and humane way for controlling free-roaming cats because they are intended to decrease reproduction without causing harm to the cats (Levy et al., 2003). Moreover, only TNR programs encounter the approval and, thus, the cooperation of cat care-takers.

So far, the evaluation of the effect of a long-term TNR program on feral urban cat populations is insufficient in our and other countries. Most published studies are short-term (reviewed in Gunther and Terkel, 2002) and on only one (Levy et al., 2003; Zaunbrecher and Smith, 1993) or two cat colonies (Neville and Remfry, 1984). Thus, it is difficult, if not impossible, to determine if any change did in fact result from the method of treatment. The only study carried out on an extensive scale (920 cats in 132 colonies) (Centonze and Levy,

[1] In the law the colony is not defined. Following Levy et al. (2003) in this paper a colony is defined as a feeding area and shelter frequented by an apparently stable population of cats.

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2002), was done on colonies (70%) that were in rural areas or in small towns, and therefore is not directly comparable with the results of TNR programs carried out in strictly urban areas.

Given the peculiar position of Italy in this context (due to the Italian laws) we feel that results of long-term TNR extensive campaigns are crucial for understanding costs/benefits of the method. Thus, in this paper we present:

1. Data on registered colonies and censused cats in Rome from 1991 to 2000.
2. The results of the neutering campaign from 1991 to 2000.
3. A survey on the effects, after several years, of demographic control of urban feral-cat colonies in the city of Rome, by the VPS in collaboration with the associations of cat care-takers.

Due to the massive neutering campaign, we would expect a decrease in number of cats and in the number of cat colonies.

2. Materials and methods

The subject of our study were feral cats inhabiting urban streets (Natoli, 1994). Following the suggestion by Gunther and Terkel (2002), they might be defined correctly, as simply "street cats" because they lived in the street, they ranged freely and they did not belong to a specific household and the majority of them were untamed.

Colonies were censused and registered by the VPS after an evaluation on the site and on the state of the cats (feral versus free-roaming owned cats); cat care-takers were responsible for capturing the cats that were then surgically neutered by the VPS and reintroduced in their original colony. The tip of the left ear was cut to identify neutered cats.

In Rome, VPS are organised in five territorial units, from A to E. When the law came out, only the VPS of Rome D was active and provided neutering for the whole city (and this was done in the dog shelter). In 1997 the public veterinary practices of Units A, B, C and E were activated. Thus, because this paper concerns the activity by the Rome D VPS, data reported here for the period 1997–2000 refer only to cat colonies of VPS Rome D rather than for the whole city of Rome.

Urban feral-cat colonies living within the Municipality of Rome were registered by VPS at the dog shelter since 1989 on the basis of: (a) citizen requests for cat-neutering or (b) the notification of hygienic (bad smell due to remains of food, sprayed urine, etc.) and/or sanitary (risk of transmission of zoonotic diseases) problems concerning the presence of cats.

A survey to describe the effects of the neutering campaign was started in November of 2000 and was completed in June 2001. We had resources to describe the number and the status of 10% of colonies registered in the period 1991–2000 in Rome. The surveyed colonies (103) were chosen within the Rome D Unit area from different contexts (historical ruins, parklands, private gardens, hospital grounds) and of different sizes, to have a representative sample of situations met in the city. Colonies were evaluated 2–6 years after first registration; no colony registered before 1994 or after 1998 was surveyed. Data recorded for each colony were: (i) number of cats initially registered c/o VPS (declared by cat care-takers); (ii) number of cats counted by VPS; (iii) number of cats neutered in public

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veterinary facilities; (iv) number of cats neutered privately (declared by cat care-takers); (v) number of cats present at date of survey, checked by VPS; (vi) number of non-neutered cats present at date of survey, checked by VPS.

Descriptive statistics are given. To evaluate the differences of number of cats in the colony before versus after the neutering campaigns, Wilcoxon (paired) signed-rank test (1-tailed) was applied. Furthermore, to assess the effects of different years on TNR program results, Spearman's rank correlation was applied to the difference in colony size under the neutering program and the actual number of years (2–6) between the neutering and the survey.

3. Results and discussion

The number of registered cat colonies has been steadily increasing from 1991 to 2000 (Table 1). Recall that the number of cat colonies that were registered in 1991 (76) refers to the whole city, whereas data reported for the 2000 refer only to a part of Rome (managed by the Health Unit Rome D) and underlines a massive increase in the attention on management of cat colonies.

Number of cats per colony ranged from 3 to more than 80. In 10 years, almost 8000 (out of 13,273 cats declared and 5792 colonies registered) were captured by cat care-takers, neutered by the VPS and reintroduced in their original colony by cat care-takers (Table 1); 2 cats out of 7980 died post-operatively.

Many cats were neutered privately at cat care-takers expenses; long time latency between the request and the VPS intervention and lack of trust in the Public Service itself were reasons more often given by cat-lovers for not using VPS facilities.

The survey carried out in 2000 on 103 cat colonies showed that the neutering campaigns brought about a general decrease in cat number (from 1655 to 1293 censused individuals) (Wilcoxon (paired) signed-rank test (1-tailed): $Z = -3.6$, $N = 103$, $P < 0.001$). In 55 colonies the number of cats decreased, in 20 it remained stable whereas in 28 of them the number of cats increased. Before the neutering campaign the number of cats per colony ranged from 4 to 50 (number of cats/colony: median = 12, $QR_{25} = 10$, $QR_{75} = 20$). After starting the neutering program, the number of cats per colony ranged from 2 to 40 (number of cats/colony: median = 10, $QR_{25} = 6$, $QR_{75} = 16$). One colony went extinct and in another case only 1 cat remained from a colony originally composed of 20 cats. Large colonies (21 cats or more) tended to be rarer (23 before and 9

Table 1
Cat sterilization campaign in Rome (Italy) by Public Veterinary Service in cooperation with Associations for Animal Protection (1991–2000)

Number	Year									
	1991	1992	1993	1994	1995	1996	1997[a]	1998	1999	2000
Cats declared	1418	1696	1174	1896	2064	1704	1364	785	407	765
Cats sterilized	953	1257	1108	900	738	492	550	531	693	758
Colonies registered	76	194	313	433	562	681	799	863	906	965

[a] In 1997 other VPS facilities were activated in Rome (see text). Data here reported for the years 1997–2000 refer only to cat colonies of VPS Rome D.

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Table 2
Results of the survey carried out in 2000 on 103 cat colonies in Rome, 2- to 6-year interval between initial and final recordings

Total cats initially recorded	1655
Total cats neutered by VPS	1005
Total cats neutered privately	419
Total non-neutered cats present today	441
Total cats declared today	1293

after TNR program), whereas small sized colonies increased in number. TNR campaign for feral cats is having some success albeit, not consistently seen in every colony. Nevertheless, the results show that TNR programs have some effects after >2 years from the beginning, as it was already hypothesised (Frank, 2004; Gunther and Terkel, 2002). In fact, in this study the colonies that were neutered 2 years before the survey increased in number of cats (13%), whereas colonies neutered 3, 4, 5 or 6 years before the survey showed progressive decreases of 16, 29, 28 and 32%, respectively (Spearman's rank correlation = −0.90; 1-tailed $P < 0.035$).

However, on the whole, we had hoped for a more-important decrease in the numbers of feral urban cats. In reality, although many cats are neutered and many neutered cats die (from car accidents, etc.), many cats are introduced in colonies (mainly by abandonment of domestic house cats). Data of Table 2 show clearly this complex demographic dynamic. The total number of cats neutered both by the VPS and privately is higher than the number of cats declared during the survey. Moreover, at survey, 34% of the cats declared were non-neutered. Available data on number of cats dead or disappeared and abandoned or immigrated, given by cat care-takers and available only for 55 colonies out of 103, could not be checked by VPS and were not included. If we compare number of cats initially registered and the number of cats present today, the percentage of cat decrease (due to death or disappearance) would be around 22%. But, if we consider the number of cats neutered during the neutering campaign (1424) plus the number of non-neutered cats at survey (441), the mortality or disappearance risk raises to 31%.

Moreover, if we compare number of non-neutered cats out of the cats initially registered (231) and the number of non-neutered cats present today (441), the percentage of cat immigration (due to abandonment and spontaneous arrival) would be around 16%. But, if we take into account the mortality risk of non-neutered cats, cat immigration raises to 21%.

Cats born within the colony do not contribute substantially to the increase because young kittens are almost invariably taken and homed by the cat care-takers.

These data suggest that the control of reproduction of owned pet cats is crucial to achieve control of the feral-cat population. An effective information campaign is needed so that the cat-owning public accepts the need for better management of their 'pets' fertility. Subsidized neutering for owned pet cats might be less expensive in the long run.

Finally, after 15 years of experience, people involved in the management of urban feral cats are aware that a more careful plan of neutering is desirable, but we also have to be careful not to identify the concept of "welfare" with only "neutering".

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4. Conclusions

This study gives some crucial information on the results of long lasting TNR programs on a large number of urban feral cats. The main evidence is that TNR programs produce a conspicuous (16–32%) decrease on total cat number, but not as great as hoped and not before at least 3 years from neutering. TNR programs alone are not sufficient for managing urban feral-cat demography, and we suggest that they be matched with an effective educational campaign directed to citizens to reduce the high risk of owned-cat abandonment.

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Control of rabies in Jaipur, India, by the sterilisation and vaccination of neighbourhood dogs

J. F. REECE, S. K. CHAWLA

A programme to sterilise and vaccinate neighbourhood dogs against rabies was established in Jaipur, India. Neighbourhood dogs were captured humanely, sterilised surgically, vaccinated against rabies and, when they had recovered, released where they had been caught. Between November 1994 and December 2002, 24,986 dogs were treated in this way. Direct observational surveys of the local dog population indicated that 65 per cent of the females were sterilised and vaccinated, and that the population declined by 28 per cent. The records of human cases of rabies seen in the main government hospital of the city between January 1992 and December 2002 showed that the number of cases had declined to zero in the programme area but increased in other areas.

RABIES is a viral neurological disease affecting all mammals, including human beings, which is invariably fatal once the clinical signs have developed. It can be prevented by vaccination but people continue to die from this distressing disease. Official figures may underestimate the true number of human cases by up to 100 times (Fekadu 1991, Cleaveland and others 2002). Rabies accounts for approximately 20,000 human deaths annually in India alone (Anon 2004a). The main vector of the disease is the domestic dog, and 94 per cent of human cases in Asia are due to dog bites (Blancou 1988). About 45 per cent of human rabies cases are children under 15 years old, and many more males than females are affected (Fekadu 1991, Dutta 2002).

The World Health Organization (WHO) has classified dogs according to their degree of dependence and the restrictions imposed on them by people (Anon 1988). In India, over 60 per cent of dogs are considered to be 'neighbourhood dogs', being either semidependent or independent of people for food and shelter and unrestricted in their movements. These neighbourhood dogs account for about 60 per cent of reported dog-bite injuries (Sudarshan and others 2001).

The treatment of human dog-bite victims in India is poor, only 47·9 per cent received any postexposure rabies vaccination, and nearly half of these received only nerve tissue vaccine (Anon 2004a), which is not recommended by the WHO (Anon 2004b). Immunoglobulins were received by only 2·1 per cent of the patients, and compliance in completing the course of postexposure vaccination was only 40·5 per cent (Anon 2004a). Thus, the most cost-effective, long-term approach to the control of rabies would be to remove the disease from the animal reservoir (Perry and Wandeler 1993).

It is difficult to control neighbourhood dogs, but several methods have been tried. The physical removal of dogs has proved to be ineffective, and it is often carried out inhumanely (Anon 1988, Anon 2004b). In Ecuador, major removal campaigns were followed by increases in the fecundity of bitches and the survival of pups, and an overall increase in the number of rabid animals (Beran 1991). Any actions that cause instability in the dog population encourage an increase in the transmission of rabies (Blancou 1988, Beran 1991). However, the removal of dogs by culling remains a popular method of supposed dog and disease control in India. In countries with large populations of neighbourhood dogs, vaccination programmes must be conducted on a heroic scale to control rabies. Largi and others (1988) cite one South American programme that vaccinated over a million animals annually for five to six years to eliminate rabies.

A threshold level of 70 per cent immune animals must be maintained if the transmission of rabies is to be controlled (Anon 2004b). Coleman and Dye (1996) calculated that the proportion of vaccinated dogs needed to control outbreaks would be between 39 and 57 per cent, and Fekadu (1991) cited a figure of 80 per cent if no dogs were to be removed concurrently with vaccination. Rabies reappeared in a previously controlled area when the percentage of vaccinated dogs dropped to 21 per cent (Beran 1991). In South America, Largi and others (1988) claimed that vaccination of 70 to 80 per cent of neighbourhood dogs controlled rabies. Anderson and others (1981) predicted that a policy of vaccination combined with population reduction would mean that a smaller proportion of animals would need to be vaccinated or removed than if only one [illegible] measures was applied.

The stability of the dog population [illegible] trolling rabies. In Ecuador, dogs under [illegible] stitute 18 per cent of the population but account for [illegible] per cent of cases of rabies, whereas adult dogs constitute [illegible] per cent of the population but only 39·8 per cent of the cases of rabies (Beran 1991). In Tunisia, an annual turnover of [illegible] per cent of a dog population was reported by [illegible] others (1999), and in West Bengal, Pal [illegible] cent mortality in dogs of less than one year [illegible] populations of cats suggest that sterilising group [illegible] leads to a lower population turnover, increased social bonds and a decrease in aggressive behaviour (Neville and Remfry 1984, Zaunbrecher and Smith 1993).

This paper describes the effects of an eight-year rabies control programme in a northern Indian city. The programme combined the sterilisation and vaccination of neighbourhood dogs and was conducted along WHO and World Society for the Protection of Animals (WSPA) guidelines (Anon 1990). During the study the number of human rabies deaths in the programme's area was reduced to zero and the population of neighbourhood dogs was reduced by 28 per cent.

MATERIALS AND METHODS

The study was conducted in Jaipur, the rapidly expanding capital city of Rajasthan, India, which has a population of approximately 2·5 million people. The city has a semidesert climate with an annual temperature range from 3°C to 46°C, and 90 per cent of the annual rainfall occurs during a monsoon period lasting two months.

Veterinary Record (2006) 159, 379-383

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TABLE 1: Numbers of dogs dealt with annually by the Animal Birth Control programme in Jaipur between November 1994 and December 2002, including all the dogs caught by the staff of Help in Suffering (HIS) and the municipal authorities

	1994	1995	1996	1997	1998	1999	2000	2001	2002	Totals
Dogs received at HIS	250	1409	2828	2558	3070	3319	4109	3627	3816	24,986
Dogs vaccinated against rabies	223	1202	2394	2280	2723	2941	3780	3377	3522	22,442
Bitches spayed	223	1169	2183	1559	1910	2441	2414	2221	2325	16,445
Male dogs sterilised (includes 10 vasectomies)	0	0	2	0	16	10	885	977	794	2684
Total number of operations	223	1169	2185	1559	1926	2451	3299	3198	3119	19,129

The Animal Birth Control (ABC) programme was started as a pilot project in a small area of Jaipur in November 1994 by Help in Suffering, an animal welfare organisation. In 1996 the pilot project was expanded to cover a larger area of the city. The area covered by the ABC programme, and this study, is approximately 14 km by 8 km. For the purposes of the study, the city was divided into a number of distinct areas along major geographical features such as main roads, railway lines and waterways. These areas varied in size but were approximately 2·3 km by 1·7 km, approximately 4 km^2.

Sterilisation and vaccination

The ABC programme focused on the sterilisation and vaccination of captured female and prepubescent male dogs.

Neighbourhood dogs were captured humanely from a given area, and the exact location of each dog's capture was recorded. The dogs were caught by using the minimum safe restraint necessary; some dogs were caught by hand, holding the scruff, but most were caught by using a hessian sack (1 m deep by 1·26 m wide) with a rope drawstring around the opening. Catching efforts were concentrated on one distinct area at a time, and a new area was selected only when no further dogs could be caught from the initial area. The new catching area was usually adjacent to the previous area because this facilitated the release of the dogs efficiently and accurately back into their territories. All the captured dogs were transported to the ABC facility, where they were individually kennelled and examined by a veterinary surgeon. Details of the animals' location, sex, description, and health status were recorded. After a rest period of between 15 and 30 hours the animals were prepared for surgery. The dogs were premedicated with trifluprómazine administered intramuscularly, and general anaesthesia was then induced and maintained by the intravenous infusion of either 2·5 per cent thiopentone solution, or a mixed solution of ketamine and xylazine. Before the surgery the dogs were given long-acting antibiotics and non-steroidal anti-inflammatory drugs. For identification purposes, each animal was given an individual alphanumeric, four-character tattoo in its right ear, and a small semicircular notch was removed by a thermocautery device from the leading edge of its left ear. The surgical site was shaved and prepared for surgery. A 1 ml dose of an inactivated, adjuvanted, cell-culture rabies vaccine (Rabigen Mono; Virbac) was administered either subcutaneously or intramuscularly with a one inch, 22 G needle into the biceps femoris muscle or the dorsal lumbar musculature. The intramuscular route was used from 2001, when Coyne and others (2001) suggested that using this route to give the vaccine induced longer lasting immunity.

Bitches were sterilised by complete ovariohysterectomy (spay) through a right flank incision; males were castrated through a single prescrotal incision. All fit females were sterilised, including animals more than three to four months old (weighing approximately 7 kg or more), pregnant animals and animals in oestrus. Only prepubescent males more than three to four months old (weighing approximately 7 kg or more) were castrated. Any animal that was found to be suffering from an incurable condition, or whose welfare was severely compromised, or was deemed dangerously aggressive, was humanely euthanased. Any animal found to have been previously sterilised and vaccinated received only a booster rabies vaccination.

After surgery, the animals were returned to their kennels to regain consciousness; they were examined daily by a veterinary surgeon and the date of their release, usually three to five days after surgery, was determined by these examinations. The dogs were released at the exact location from which they had been captured.

A register was maintained in which the details of all the captured dogs were recorded, so that the programme could be monitored in detail, and data on the behaviour of neighbourhood dogs could be collected.

Population surveys

The area selected for the population surveys was the old, partially walled, city of Jaipur known as the 'Pink City'. It was chosen because it had only limited potential for further development, contained a cross-section of residential, commercial and civic areas, and was considered to be representative of the larger modern city. Direct observational counts of the numbers and types of dogs were made every six months at climatically benign times of the year, in March/April and September/October. To minimise counting variables, each survey was performed between 06.30 and 09.00 by the same staff, following the same route through the area. The Pink City was subdivided into six subareas, each of which was counted on consecutive days, mainly on foot, in the two-and-a-half-hour period by two teams, each consisting of a recorder, usually a veterinary surgeon, and an experienced animal technician. The dogs were recorded as males, females, and puppies, and further subdivided into those with ear notches (which had been through the ABC programme) and those without. A puppy was defined as a young dog with an

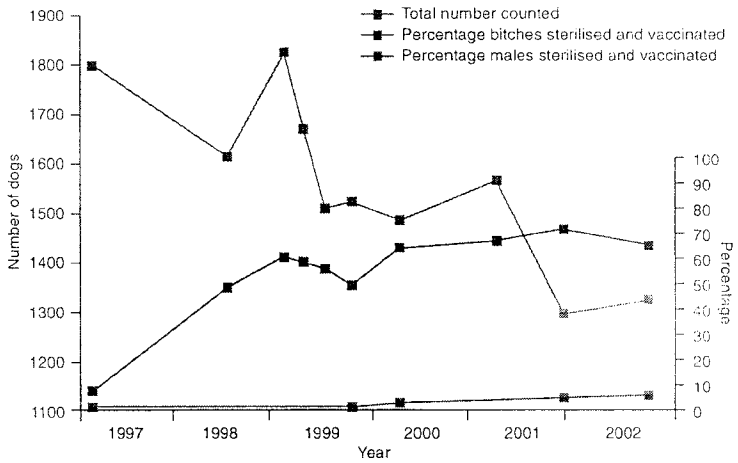

FIG 1: Total numbers of dogs counted in the Pink City area of Jaipur, and the percentages of the males and females that were sterilised and vaccinated against rabies

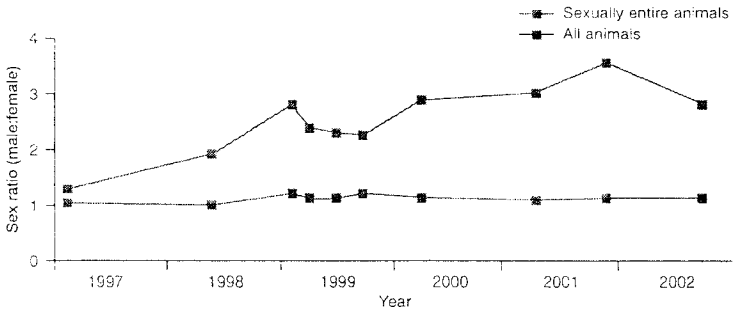

FIG 2: Effects of the programme of sterilisation on the sex ratio of the population of neighbourhood dogs in the Pink City area of Jaipur between February 1997 and August 2002

estimated weight of less than 7 kg; dogs of this size were not caught for the ABC programme.

Human rabies mortality data

The records of the Infectious Diseases Unit of the Sawai Man Singh (SMS) Hospital (the main government hospital) in Jaipur were reviewed over six visits to the unit during 2002/03 to extract information on patients with rabies admitted to the hospital. The records from January 1, 1992 to December 31, 2002 inclusive were reviewed, and all the information on these patients was documented. The patients' records were then arranged by area of residence, separating those patients who came from within the area of Jaipur included in the ABC programme (the ABC area) and those patients that originated from outside the ABC area but still within the administrative area of Jaipur (the non-ABC area). The total number of symptomatically rabid patients treated at the hospital was also recorded, regardless of their place of residence and including patients coming from throughout Rajasthan state. Attempts to verify the information recorded in the hospital records were made by visits to a number of the patients' families. The diagnoses were not routinely confirmed postmortem owing to the lack of expertise and facilities in the hospital.

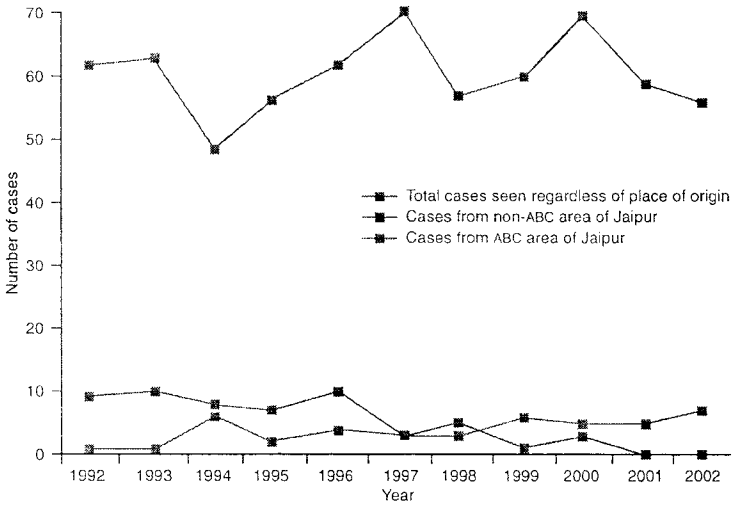

FIG 3: Numbers of human cases of rabies recorded in the Sawai Man Singh Hospital in Jaipur from all regions, from the area of Jaipur covered by the Animal Birth Control (ABC) programme and from the non-ABC areas of Jaipur

RESULTS

Sterilisation and vaccination

Between November 1994 and December 2[illegible] a total of 22,442 dogs were vaccinated against [illegible] sterilisation operations were performed [illegible] were ovariohysterectomies [illegible] tured, 10·3 per cent were unmar[illegible] examination as being unfit for sterilisation [illegible] by reason of illness, injury or temperament; this proportion remained constant throughout the study. The numbers of animals passing through the programme increased annually, from 1409 in 1995 to 3816 in 2002. During each of the last three years of the study, over 3100 dogs were [illegible] sterilised and released, nearly nine animals per working day. The total cost of each sterilisation and vaccination was about £4.80 at 2004 rates.

Population surveys

During the eight-year study period a decline in the neighbourhood dog population of 28 per cent was recorded between the peak and the last surveys (Fig 1), an average annual decline of 3·5 per cent. The proportion of surveyed female dogs that had been sterilised and vaccinated increased from zero at the beginning of the study to 65·7 per cent in 2002 (Fig 1), and the proportion that had been sterilised exceeded 65 per cent during the last three years of the study. Because only prepubescent male dogs were sterilised and vaccinated, the proportion of sterilised male dogs surveyed in the population increased more slowly (Fig 1). The ratio of sexually entire males to sexually entire females increased from 1·21:1 at the beginning of the study to 2·68:1 in 2002, although the ratio of genotypically male to genotypically female dogs remained approximately 1 (Fig 2).

Human rabies mortality data

During the study period the number of human rabies cases from the ABC area of Jaipur declined from a maximum of 10, and from October 2000 to December 2002, no cases of human rabies originating from the ABC area were reported in the Infectious Disease Unit of the SMS Hospital (Fig 3). However, the number of human rabies cases reported annually in residents of the non-ABC area of Jaipur increased during the study, and the total numbers of human rabies cases recorded annually, including those coming from throughout Rajasthan, remained approximately constant (Fig 3).

DISCUSSION

The data collected during this eight-year study provide evidence that rabies can be controlled in an Indian city through a combined vaccination and sterilisation programme of the neighbourhood dog population.

The programme endeavoured to follow WHO guidelines with respect to the vaccination of neighbourhood dogs against rabies. Dogs were revaccinated whenever the opportunity presented itself. Coyne and others (2001) reported that vaccination provides protection against challenge for up to 41 months if the vaccine is administered intramuscularly; for most neighbourhood dogs this period will exceed their lifetime (Butler and Bingham 2000, Pal 2001). The Jaipur ABC programme has been using the intramuscular route for vaccination since those studies were published.

The direct observational counts of the neighbourhood dog population, made along defined routes, are not ideal. Censuses by this method were initiated when the programme was in development, and alternative methods of counting the dogs have since been suggested. However, no means have been found of correlating the data from any revised method with

the data from the original method, and the census data have therefore continued to be collected by the method adopted originally.

The most recent population surveys indicate that 65·7 per cent of the currently alive female dogs and 5·8 per cent of the males have been vaccinated and sterilised. Figures from the most recent population survey imply that the vaccination coverage of the whole population is 35·5 per cent; this ignores a few animals that were vaccinated only, and is thus a low estimate of the total vaccination coverage. This figure is only slightly lower than the percentage cited by Coleman and Dye (1996) required to control the disease. If it is assumed that rabies transmission has been controlled at these vaccination coverage levels, they are substantially lower than the levels reported from other areas where sterilisation methods were not employed, for example, 83 per cent vaccination coverage in the Philippines and 60 per cent in Ecuador (Beran 1991). The data presented here are therefore consistent with Anderson and others (1981), who predicted that the threshold proportion for rabies control would be lower if vaccination and population reduction were practised together.

The Help in Suffering ABC programme has targeted dogs included in the lowest WHO categories of dog: neighbourhood dogs, unrestricted/unsupervised dogs and truly feral dogs. Most reported rabies control programmes concentrate on family and pet dogs, yet even with these more biddable groups, 11 to 15 per cent of the dogs are reported to be uncatchable (Anon 1988, Seghaier and others 1999). Despite intensive, skilful catching efforts, approximately 30 per cent of bitches in Jaipur are uncatchable by current techniques. The ABC programme's catching efforts may exert a selection pressure on the dog population in favour of undesirable behavioural traits; solutions to this problem are being investigated.

Dogs less than one year old are over-represented in rabies cases (Beran 1991); the affinity between children and young dogs may explain the large numbers of cases of rabies in children. The importance for rabies control of timing vaccination efforts to ensure that animals are vaccinated as young as possible has been stressed by Anderson (1986), MacInnes (1988) and Brochier and others (1991). The Jaipur ABC programme sterilises and vaccinates puppies that are estimated to be over four months of age (7 kg bodyweight). Stubbs and Bloomberg (1995) have shown that there are no veterinary or developmental problems associated with the sterilisation of young dogs except hypothermia during general anaesthesia. In Jaipur and elsewhere on the Indian subcontinent, breeding in neighbourhood dogs is highly seasonal, with the peak whelping season in Jaipur being October and November (Pal 2001, Chawla and Reece 2002); as a result, many puppies could be caught for the ABC programme during the winter. The risk of hypothermia in young animals has been found to be real, and the programme has had to balance the desire to vaccinate and sterilise as many young animals as possible against the welfare problem of hypothermia.

The unreliability of human rabies data collected in many countries where the disease is endemic, including India, is recognised. The decline in human rabies cases within the ABC area of Jaipur may be an artefact; however, the disease reporting procedures and records would have been expected to become more accurate over the period of the study. The population of the city has doubled during the study period. Increases in public awareness due to the programme's daily activities in residential areas may be a further factor confusing the apparent reasons behind the findings. The hospital workers recording data on individual human cases were independent of the ABC programme, and were, for much of the time, unaware of the programme. The veracity of the finding that the Jaipur ABC programme has caused a decline in human rabies cases within the ABC area of Jaipur is supported by the increases in human rabies cases reported in the non-ABC areas of the city; these non-ABC areas are rapidly expanding residential developments on the periphery of the city.

The authors believe that the combined sterilisation and vaccination procedure of the ABC programme may be an effective and humane method for controlling rabies in endemic areas with large populations of neighbourhood dogs, and may also create a more stable, smaller population.

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Understanding issues and solutions for unowned, free-roaming cat populations

Margaret R. Slater, DVM, PhD

Free-roaming cats are at the center of an international controversy. To put it bluntly, in some countries, the question has become do we cosset or euthanatize unowned cats? Are they to be seen as victims or villains? In the United States, concerns and conflict have penetrated the scientific world as well as the consciousness of the general public. The past 5 years have seen an increase in related peer-reviewed publications, presentations, and letters to the editor as well as articles in newspapers and cat-oriented magazines.

How animals are viewed has changed, and companion animals, in particular, are perceived to be worth more than their economic value. Animals have been shown to feel pain, fear, and other emotions. This shift in values and attitudes toward animals, together with advances in animal welfare science, has created widespread support for the idea that animals deserve consideration of their well-being and health needs beyond minimal food and shelter. Euthanasia of companion animals because no one wants them is no longer the preferred solution to an overabundance of dogs and cats. This shift in mentality also means that questions are increasingly being asked about how to best control ownerless, free-roaming cat populations. The passion human stakeholders bring to this debate becomes easier to understand when one considers that cats have been the most popular pet in the United States for the past several years.[1]

Issues and solutions for dealing with unowned free-roaming cats are not simple, inexpensive, or broadly applicable. Indeed, even the definitions of each cat subpopulation are unclear. Let me begin by defin-

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ing some terms.[2] A free-roaming cat is the general term for any cat living outdoors at least part of the time. Unowned free-roaming cats include stray socialized cats that are lost or abandoned as well as unsocialized feral cats. For the purposes of this discussion, a feral cat is one that is too frightened of humans to be placed into a typical home as a companion animal. Further complicating our understanding of cat subpopulations is the fact that cats may move from one subpopulation to another during a lifetime. For example, an owned cat that is abandoned and living on her own for a time may become feral. That cat may have kittens that are also feral, or her kittens may be caught before they are 8 weeks old and be socialized, becoming suitable indoor companion animals. Understanding what each scientist means by each term is important when data from different studies are compared. Also, each subpopulation comes from a somewhat different source, and different interventions are required for control of existing cat populations (eg, sterilization) and prevention (eg, identification and education).

A key to comprehending the fervor surrounding free-roaming unowned cats is understanding the difference in people's perceptions of them. Cats serving in the role of companions may be viewed as family members. Cats working to keep rodents under control in barns, stables, and gardens may be valued but only in terms of their ability to perform their job well. Still others perceive cats as nuisances that defecate in gardens, leave pawprints on cars, make noise at night, or carry disease. Each perspective colors the views of scientists, policymakers, and ordinary citizens; gives rise to different solutions to the problem of free-roaming cats; and is accompanied by a different comfort level in implementing each proposed solution.

Historically, cats have been viewed as gods to be worshiped and protected, the devil's tool, or witches' familiars.[3] This ambivalence is seen today in the contrast between cats as the most popular companion animal in the United States and much of western Europe[4] and popular images of them as sneaky, furtive, and indifferent to humans. Cats were, and in some cases still are, believed to be unclean and carriers of disease.

Free-roaming unowned cats, especially feral cats, are considered to be peripheral to our orderly world. They are not owned and therefore have no one to bring them as patients to veterinary clinical settings. They are not subjects of our direct concern, and this makes it easier to view these cats as different from companion animals. This also precludes caring for them as would be appropriate for a family member. In addition, there is the reality that truly feral cats cannot be handled in the same way as socialized cats.

At this point, what should be done with existing unowned cats becomes subject to debate. Is it most humane to trap and euthanatize them? What length and quality of life will they enjoy if they are sterilized, vaccinated, and cared for on a daily basis? What are the practical implications of available solutions? In some countries, cats are poisoned, shot, and hunted with dogs. That would not likely be well received in the United States, even if it were legal. Which option is most effective over the short and long term? What choices prevent public health problems and wildlife predation?

The answers to some of these questions are still unknown. What we do know is that euthanatizing on location by use of poisons, guns, and disease introduction is not practical in inhabited areas or other wildlife species might also be killed. Even on islands, a geographic area is more manageable, millions of dollars and thousands of hours of work over many years have been needed to eradicate cats.[5] And all this with a closed cat population. Trap and remove for euthanasia has been practiced in many localities for many years as part of animal control programs. To the best of my knowledge, no location has ever achieved long-term control of free-roaming cats by use of this method. Relocation of unowned cats to sanctuaries is an appealing option; however, there is limited space available, and these cats may not receive proper care nor are they ensured a good quality of life. Sometimes, relocation to a new place where the cats are wanted is an option. But there are risks to the cats in adapting to their new home, and there are not always residents willing to take on more cats.

Trap, neuter, and return as a nonlethal control method has been proposed as a viable option.[8] In this method, cats are humanely trapped, anesthetized, examined, sterilized, vaccinated, ear-tipped or notched, and returned to their caregivers for daily food, water, shelter, and supervision. On college campuses, several programs have been shown to have been effective.[9,10] In Massachusetts, a community program included a cat-only shelter, education on rehoming a cat, and low-cost sterilization.[2] That program has been extremely successful at reducing the number of free-roaming unowned cats to the point where there are no longer cats in some locations on the waterfront, where there were previously numerous cats.[8]

The public health implications of free-roaming cats are complex. Public health agencies are charged with protecting the health of the public. This means that they address possible risks and focus on problems for humans. The numbers of humans involved, severity of the health problem, and degree of public concern all influence the importance of a particular disease to public health officials, especially in the competition for scarce resources. The problem for public health officials is further complicated by the fact that the actual magnitude of the risk of many zoonotic diseases potentially carried by free-roaming cats is unknown.

Related public health concerns in the United States frequently center on rabies. In the United States, rabies is maintained almost entirely in wildlife. Most cases of rabies are in skunks, raccoon, bats, and coyotes.[11] In 2001, 93% of all rabies cases were in wild animals.[12] Domestic animals are then infected by these species. Cats have become the most common domestic species infected with rabies since the early 1990s, possibly due to less consistent vaccination of cats and their being allowed to roam more freely than dogs.[12-15] Dogs and cats are nearly always infected with the local terrestrial rabies virus variant.[16] Therefore, dogs and cats are unlikely to play an important role in transmission of bat variant rabies to humans.

Since 1990, 33 human cases of rabies have been reported in the United States. Seven people were infected outside the country, generally with the dog variant.[12] All but 2 of the remaining 26 people were infected with bat variants of the virus. The remaining 2 cases were dog-coyote variants. No human cases of rabies have been associated with cats in recent decades in the United States. Control of rabies in wildlife species has been primarily through oral immunization of free-ranging animals. Programs aimed at long-term, widespread reduction of wildlife populations, possibly infected with rabies, are not recommended and have never been shown to be effective.[12]

In Asia, parts of Latin America, and much of Africa, exposure to infected dogs continues to be the major source of rabies in humans.[17] Widespread vaccination campaigns as well as research on how best to achieve compliance with vaccination have been conducted. While relatively little research has been done on cat populations and control of rabies, studies[18-20] of dog populations in a number of countries offer some suggested solutions. Culturally sensitive programs must be designed to effectively control rabies, and the relationships between residents and animals must be understood.[19,21] The WHO recommended not to pursue dog removal as part of rabies control programs.[19,20] Instead, vaccination of pets and livestock has been shown to provide a barrier that protects humans from wildlife rabies, and available vaccines are very effective.[12,16] Vaccination of many free-roaming cats may achieve a herd immunity effect[22] and provide an additional barrier between rabid wildlife and humans.

Another important public health concern is bites. While dog bites are more common in the United States, cat bites are more likely to result in rabies postexposure prophylaxis.[14] Cat bites are more likely to be from unowned cats that are provoked.[15,23,24] Cat bites or scratches are more commonly inflicted on adult women in the summertime; therefore, education, reductions in numbers of stray cats, and avoiding direct contact should reduce risk of cat bites substantially.

Many other potentially zoonotic diseases may be of concern to public health agencies and veterinarians.[25] Toxoplasmosis is a disease that is often discussed because cats are the only species known to excrete oocysts in their feces.[26] Tests on 33% to 58% of stray cats were positive for antibodies.[26,27] Thirty-eight percent of domiciled adult cats were seropositive. However, epidemiologic studies[28,29] of risk factors for toxoplasmosis in humans implicate environmental and food-related factors, not living in a neighborhood with cats. In addition, mechanical transmission of oocysts by other species such as dogs has been documented.[30] Discussions of other common zoonoses applicable to free-roaming cats have been published.[2,25]

Debates about free-roaming cats and wildlife generally focus on 3 major issues. The first is predation on native species by cats. The second is the concept of cats as an introduced species that should not be allowed to remain in the wild. The third is more philosophical in nature: cats are viewed as a domestic species; consequently, it is seen as our responsibility to keep them safely confined for their protection as well as the protection of other species.

Predation by cats is studied by scat analysis, analysis of samples obtained from the gastrointestinal tract, records of prey brought home, or remains of prey found in the field. Each method has its limitations, and results from 1 study may not be comparable to results from studies that use other methods. This needs to be considered when evaluating and making generalizations about predation by cats.[31] Cats are opportunistic predators, eating whatever food sources are readily available, including carrion, garbage, and cat food. In general, cats' diets on the mainland comprise approximately 70% mammals.[31] The remaining components of their diet vary by geographic location and proximity to humans. Birds, reptiles, insects, and garbage are all possible food items for cats.[32] Urban cats are likely to have different consumption patterns than cats living in rural or wilderness areas. The prey of cats in cities and towns are likely to be nuisance species, such as rats, mice, starlings, and pigeons, rather than endangered ones.[33]

The argument that cats are an introduced species and therefore must be removed to ensure survival of native species is based on several assumptions. The first assumption is that if cats were removed, the habitat would return to its normal state. This is likely not true because cats are often introduced along with rats, birds, and other predators. Ecosystems are complex, and many factors including the control of rats by cats may be involved.[34] Furthermore, human alteration of the environment is the primary reason for reduction and extinction of native species.[35] Cats are commonly blamed for extinctions despite inappropriate extrapolations, small sample size, and unclear definitions.[36-38] They have even been blamed for extinctions of species that were never present.[6]

The second assumption is that we must protect native species from introduced species. This argument has been differentially applied.[39] Indigenous coyotes, wolves, bears, and cougars who hunt introduced livestock have been killed for decades to protect domestic species.

The last issue is linked to the rights of animals, itself a very vexing idea. By allowing cats to roam, it is believed that we place more value on the needs of the cat than on the lives of the prey the cat might kill. This argument is not based on the number of prey or ecosystem preservation, but on an individual humans perspective of what cats may need to preserve their quality of life. It is at least arguable that cats can enjoy a satisfying quality of life as safely confined companions in modern home life.

In recent years, increasing numbers of people have expressed concern over the well-being of free-roaming cats themselves. Free-roaming cats are vulnerable to attack by dogs, coyotes, humans, disease, starvation, and climate. There are difficult questions about an unowned cat's quality of life and the importance of interactions with humans. There are concerns about disease spread between cats as well as between cats and other species. Reliable answers to these questions are as yet indeterminable. At present, it appears that cats spread few diseases

to other cats.[40] Commonly cited diseases and agents that may be spread between cats include feline leukemia, FIV, and various parasites.

Feline leukemia virus and FIV are of concern for unowned and owned cat populations. Large studies have shown that rates of infection are usually about 5% for feral cats, which is not substantially different from rates determined for pet cats.[10,41-43] Male cats are more likely to have FIV because that virus is spread by biting and fighting. Feral cats (4% to 18%) in the United States appear to be at lower risk for feline coronaviruses than pet cats (59%).[42] Because coronavirus is primarily transmitted by the fecal-oral route, burying of feces in the environment rather than sharing an indoor litter box may play a role.

Drawing definitive conclusions about parasites in free-roaming unowned cats is difficult because many studies define cat populations in different ways. Studies have also used convenience samples that may not be representative of the general population. In addition, studies have been performed in different countries, which makes generalization difficult. Some work on the feral cat populations in the southern United States has provided data specific to that group. In Florida, 92% of cats in a sterilization program had fleas and 37% had ear mites.[44] One study[43] involving 80 feral and 70 pet cats in California found that feral cats had a somewhat higher prevalence of internal parasites but a similar prevalence of feline viral diseases. Therefore, control of infectious disease needs to address risks associated with all cats. Reducing free-roaming cat populations will contribute to the health of cats in general.

Veterinarians have a central role to play in reducing numbers of unowned free-roaming cats. As part of general practice, veterinarians must provide education about the importance of proper health care and identification as well as about selecting a pet that is a good match for the owner.[29] Veterinarians must encourage permanent methods of identification such as microchips or tattoos. They should be proactive in identifying behavioral problems that might cause a cat to be exiled to the outdoors or abandoned. Veterinarians should also know available resources in the community that can help rehome cats that cannot be kept and provide a suggested contact for additional sources of companion cats, cat welfare-related organizations, and general cat husbandry. All of these practices will help decrease the likelihood that a cat will become unowned and should be a part of routine veterinary care.

Veterinarians have many opportunities to help reduce existing populations of unowned, free-roaming cats. They may partner with reputable animal shelters, rescue organizations, or feral cat grass-roots organizations. They may start an organization that helps place homeless cats. They may offer seminars and written materials for their clients, the public, and members of local animal protection organizations on basic infectious disease control, health requirements, or behavioral problems associated with cats. Many veterinarians already choose to volunteer their time at a feral cat spay day or work as a surgeon in a spay/neuter clinic.

Successful control of free-roaming unowned cats within communities requires that a combination of approaches be used. Humane societies and animal care and control agencies need to consider solutions that reach beyond their doorsteps. Grass-roots organizations must increase their visibility and become more professional in their approach. Veterinarians must recognize their key role as the only source of spay and castration surgeries. Veterinarians also have a responsibility to help reduce sources of free-roaming unowned cats by addressing behavioral problems, pet selection, identification, and vaccination. Doing nothing is not a viable alternative when faced with nuisance complaints, public health concerns, and predation as well as concerns about the welfare of the cats themselves. Creative and effective solutions can be developed only by finding common ground and bringing the strengths of each group to bear the problem. A flexible, tailored, and multifaceted approach will be needed to make a difference in the numbers of free-roaming, unowned cats in the United States, a goal that, after all, is widely shared.

[a]LeBaron S, Merrimack River Feline Rescue Society, Newburyport, Mass: Personal communication, 2003.

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Humane strategies for controlling feral cat populations

Julie K. Levy, DVM, PhD, DACVIM, and P. Cynda Crawford, DVM, PhD

What Are Feral Cats?

The domestic cat has increased in popularity as a household pet in recent decades, surpassing the dog to become America's most numerous pet.[1] Despite the enhanced status of cats as human companions, millions of unwanted cats are admitted to animal shelters each year and most of these cats are euthanatized because homes cannot be found for them. Debate about the true impact of free-roaming cats on the environment, on feline welfare, and as a reservoir of feline and zoonotic diseases is ongoing, often emotional, and fueled largely by a lack of sound scientific data on which to base credible conclusions. Separating the impacts of free-roaming, owned cats from those of unowned cats is also difficult.

Definitions of various cat populations defy universal acceptance and focus variably on ownership status, lifestyle, and degree of socialization. Cats may be defined as free-roaming if they are not confined to a yard or house, a definition based on confinement of the animal rather than ownership or degree of socialization. Strictly speaking, feral cats are defined as those that are untamed and evasive. They are either born in the wild and lack socialization or are abandoned to the wild and become untrusting of humans. Although feral kittens can be tamed into acceptable pets if captured at

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CARING FOR FERAL CATS IN THE CLINIC

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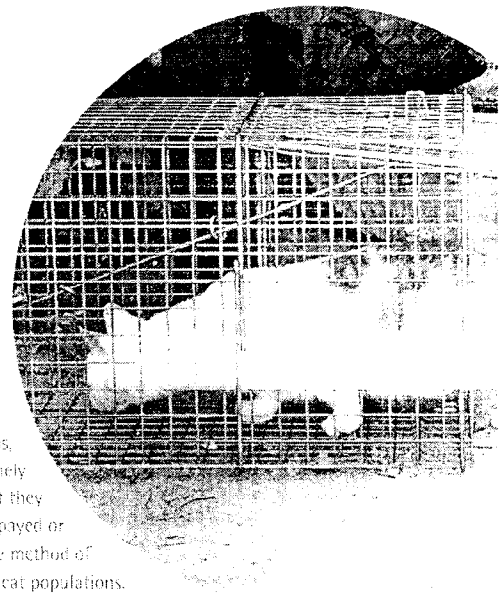


Trap-neuter-return programs, which involve humanely trapping feral cats so that they can be vaccinated and spayed or neutered, are an effective method of controlling feral cat populations.

Courtesy of Bryan Kortis/Neighborhood Cats

Although the veterinary community has played a major role in promoting and performing spaying and neutering of owned pets, services for feral cats have lagged. Feral cats and their offspring are victims of abandonment and accidental loss. Their plight is the result of pet owners allowing their cats to roam or failing to spay or neuter their cats before they produce even one litter. In 2000, the estimated number of feral cats in the United States approached 73 million.[1]

Feral cats are a subcategory of free-roaming cats that are not socialized to people, may be one or more generations removed from a home environment, and may live in a group, or colony, of similar cats. Other subcategories of free-roaming cats are strays, including previously owned cats that have been lost or abandoned and neighborhood cats fed by several people but truly cared for by none, and owned cats that are allowed to roam. Almost 40% of suburban and urban cat owners (and a much larger percentage of rural cat owners) allow their cats to roam some of the time.[2] These cats are at risk for becoming stray and feral and for having kittens that – if they survive (the mortality rate of feral kittens may be as high as 75%[1,3]) – will become feral without early socialization to humans. Feral and stray cats produce approximately 80% of the kittens born each year and are the most important source of cat overpopulation.[1]

REDUCING FERAL CAT POPULATIONS

Although the sterilization rate for pet cats is high in the United States (82% to 91%[1,2]), many cats in some parts of the country have litters before they are sterilized for numerous reasons, including:

- The owners could not afford the procedure.
- The owners thought the cats were too young to get pregnant.
- The owners did not make sterilization a priority.
- The pets were indoor cats that escaped.
- The owners thought the cats could not become pregnant because they were still nursing kittens from a previous litter.

Sterilizing cats before they have even one litter can greatly reduce the number of homeless cats. However, any strategy will fall short if emigration from the owned cat population continues. The AVMA's June 2005 position statement on free-roaming, owned cats "strongly encourages owners of domestic cats in urban and suburban areas to keep their cats indoors."

Currently, the management program known as *trap-neuter-return* (TNR) is considered the best strategy for reducing the feral cat population, and veterinarians and their staff play a critical role in its success. The goals of TNR are to maximize the quality of life for cats in an existing colony and to reduce or eliminate the colony through attrition. The second goal is achieved by ensuring that colony members that die are not replaced by new members, which can be accomplished by removing kittens and friendly adults (usually recently lost or abandoned stray cats) for possible placement in homes, euthanizing animals when their suffering cannot be alleviated, and regularly monitoring colonies for the arrival of new members.

SOURCES OF CARE FOR FERAL CATS

Some veterinary professionals care for feral cats as a community service. Others get involved because they object to killing healthy animals or believe that methods used in the past, such as ignoring feral cats or trapping and removing them, are not effective or humane strategies for reducing the number of feral cats in their communities.

Animal care and control agencies may respond to nuisance calls about cats that fight, yowl, spray, and reproduce by trapping a number of these cats. However, these agencies do not have the staff, time, or money to proactively trap and remove, shelter, and euthanize large numbers of feral cats. In most cases, feral cats brought to shelters by the public are deemed unadoptable; therefore, it is doubtful that volunteers could be enlisted to humanely trap these animals knowing the cats will be euthanized.

Many concerned citizens feed feral cats; however, they often do not understand the consequences of not doing more for these animals. If they do come to the realization that these cats need more care, they either cannot find the necessary services or they cannot afford them. Other concerned citizens learn about TNR and are willing to take on the expenses of surgery, vaccinations, food, and supplies and ongoing management of the feral cat colony. These caretakers become regular clients of local veterinary practices. In fact, many may already be well acquainted with veterinary clinics because they have pets of their own – households that feed free-roaming cats are 40% more likely to own at least one cat than households that do not feed such cats.[4]

WORKING WITH FERAL CATS

It is important for the veterinarian and his or her staff to educate themselves about the plight of feral cats and how to work with them. In addition to obtaining information from resources such as Web sites, videos, books, workshops, and conferences, veterinary professionals can get practical experience by working with veterinarians and staff who provide services for feral cats or by participating in a feral cat clinic. Groups such as Neighborhood Cats (a nonprofit group in New York) and Operation Catnip (a nonprofit organization with chapters in Raleigh, North Carolina; Gainesville, Florida; and Richmond, Virginia) that specialize in management of feral cats through TNR can also be good sources of information.

Regardless of how many feral sterilizations an individual veterinary practice provides, the effort will prove valuable as long as the procedures are performed on a consistent basis. Bryan Kortis, director of Neighborhood Cats, says, "In a community with a few hundred feral cats, a private veterinarian network with the capacity to sterilize even five cats a week will mean a substantial percentage of the population will be neutered within a year. Even in communities with much larger feral populations, the willingness of private veterinarians to handle a small number of cats on a consistent basis will allow the program to get under way while other efforts to increase spay/neuter capacity are pursued."[a]

Technicians can contribute greatly to the provision of services for feral cats. According to Julie Levy, DVM, PhD, DACVIM, "Technicians, acting as coordinators, can do all the client education (e.g., how to use traps, presurgical withholding of food, postsurgical care), control the work flow, do all the animal handling, and make it easy for veterinarians to provide services for feral cats."[b]

The veterinary practice's hands-on role in TNR generally begins when a client shows up with one or more trapped cats; however, advance planning is wise and makes working with feral cats easier and more rewarding. The staff should provide feral cat caretakers with written guidelines on humane methods of trapping feral cats, including when to withhold food and water, how to identify traps, and which traps are acceptable, as well as the practice's hours of operation, charges for routine and other procedures, payment plans, handling of unexpected findings (e.g., cryptorchidism, pyometra, illness, injury, pregnancy, positive FeLV/FIV

[a]Kortis B: Personal communication, Neighborhood Cats, New York, 2006.

[b]Levy JK: Personal communication, College of Veterinary Medicine, University of Florida, 2006. In addition, Dr. Levy is cofounder of the nonprofit organization Operation Catnip in Gainesville, Florida.

Resources

Programs

For a list of veterinarians in your area who care for feral cats, contact SPAY USA (800-248-SPAY; www.spayusa.org) or Friends of Animals (800-321-PETS; www.friendsofanimals.org). Information on local voucher programs may be obtained from animal shelters and humane organizations serving your region.

Publication

Slater MR: *Community Approaches to Feral Cats.* Washington, DC, Humane Society Press, 2002.

Videotapes

Left Lateral Flank Spay – Available through the National Humane Education Society by calling 304-724-6558.

Working with Feral Cats in Practice (Lemarr W, Griffin B) – Order form can be obtained at www.vetmed.auburn.edu/index.pl/educational_videos; there is a $15 donation fee.

Web Sites

www.alleycat.org – Information is provided on how to care for feral cats, how to start and organize a TNR program, and how to change public policy.

www.azcats.org – The site's resource center has downloadable literature, frequently asked questions, links to other TNR programs and animal rescue organizations, and low-cost spay/neuter information.

www.humanesocietyu.org/workshops_and_classes/tnr.html – The site offers a self-paced online feral cat colony caretaker course.

www.neighborhoodcats.org – Information that encompasses all aspects of managing a feral cat colony and implementing TNR can be downloaded.

www.petsforlife.org – Cat behavior tip sheets are provided in English, French, and Spanish for fosterers and adopters of feral cats.

www.vetmed.auburn.edu/index.pl/clinic_forms – Sample release forms are provided.

test results), and criteria for euthanasia (because a feral cat cannot be examined until anesthetized and often has an unknown health history [unless the same person has been caring for the cat for a long time]). Caretakers should sign an agreement/release form acknowledging that there may be increased risks of anesthetic and surgical complications.

One complaint veterinarians often have about feral cat caretakers is that they believe their needs should take precedence over the normal day-to-day operations of the clinic. In fact, the caretaker is the one who must learn to accommodate the veterinarian's routine if he or she expects continual discounted veterinary services. Like other clients, some caretakers may try to take advantage of a veterinarian's generosity and compassion. On the other hand, the veterinarian and his or her staff should understand that caretakers are taking personal responsibility and using their own funds to care for cats that would otherwise suffer and continue to reproduce. Practices may provide affordable services to caretakers by accepting vouchers or coupons for subsidized sterilization and, because feral cats may be difficult to trap during a particular time frame, accepting rain checks for subsidized procedures done outside the hours set aside for them.

HANDLING FERAL CATS

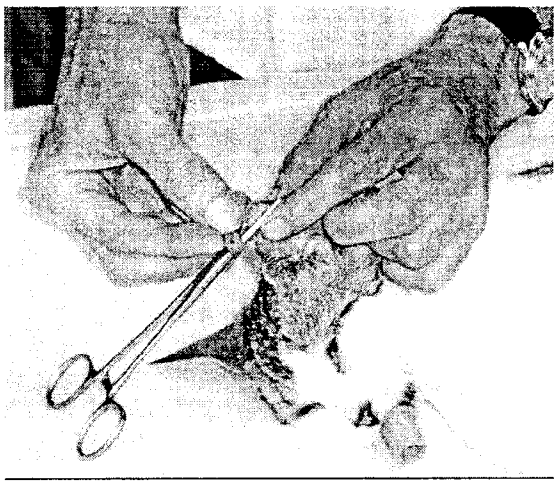
Feral cats should not be handled unless they are under a surgical plane of anesthesia. They should be brought to the practice in individual traps covered with a sheet to minimize stress. Cardboard carriers are not acceptable because they allow cats to escape easily. Lobster boxes, laundry baskets, pillow cases, and bird cages are also unacceptable containers.

Most cages used in veterinary practices are not suitable for holding feral cats; therefore, if a feral cat needs to be placed in a hospital cage, it should be put in a feral cat den or handler,[c] which should then be placed in the cage. Without the covered, dark space the smaller box provides, the cat will not feel hidden and will remain frightened and stressed. The feral cat den is ideal because it has a round door that can be tipped open or shut through the bars of the cage; however, if this type of box is not available, the cat may be housed in a small, solid carrier before being placed in the cage. The door to the feral cat den or small carrier should always be shut through the bars of the cage before the cage door is opened so that the cat does not get out. If a suitable box or carrier cannot be obtained, part of the cage should have a towel or sheet draped over it so the cat feels that it can hide.

Any carrier, cage, or trap containing a feral cat should be identified to ensure the safety of staff and others who may come into contact with it, including clients, drug representatives, and service personnel. For example, a prominent warning reading "Do not approach, this cat bites!" may be attached to the container housing the cat.

All staff working with feral cats should be trained regarding safety. They should wear padded gloves, have protective titers against rabies virus, and handle only cats that are anesthetized.

[c]Feral cat dens (Animal Care Equipment & Services, Inc., Denver) and handlers (Tomahawk Trap Company, Tomahawk, WI) are small carriers with portholes. They are designed to provide a safe, quiet hiding place for cats.



Courtesy of Meredith Weiss/Neighborhood Cats

▲ Ear tipping (surgically removing the tip of a feral cat's ear) is an essential method of marking a sterilized feral cat so that it can be identified in the future.

If transferring an awake feral cat to different housing is unavoidable, it should always be done in a closed room with a solid ceiling because cats can rapidly go through a suspended-tile ceiling. Although some staff members are adept at using gloves, towels, or thick blankets to catch fractious cats, this technique should not be used to restrain a feral cat because it is not only unsafe for staff but also very stressful for the cat. A more appropriate way to catch a feral cat is with a special net that staff members have been trained to use correctly. The net should have small mesh and should be closable once the cat is either in or under it. If the cat escapes to an inaccessible place, tuna in oil, sardines in oil, or mackerel should be placed in a humane trap, with water available outside the trap.

ANESTHETIZING FERAL CATS

A quiet area should be prepared where a feral cat can be held in a trap before and after surgery. Providing a 15- to 30-minute "cool-off" period after the cat's arrival decreases stress and may provide for a smoother anesthetic induction.

Anesthetic Agents

A cocktail known as TKX (tiletamine-zolazepam, ketamine, and xylazine) is one anesthetic agent commonly used in feral cats. TKX is relatively inexpensive, requires only a small dose for anesthetic effect, is predictable, and causes few deaths. The agent is prepared by reconstituting one vial of dry Telazol (500 mg) with 4 ml of ketamine (100 mg/ml) and 1 ml of large-animal xylazine (100 mg/ml). TKX is administered IM in a dose of 0.25 ml/cat, with a maximum dose of 0.3 ml/cat; small kittens[d] may be given 0.1 to 0.15 ml. Vomiting is uncommon, recumbency usually occurs in 3 to 5 minutes, and 30 to 60 minutes or more of anesthesia is provided. If reversal of the xylazine component is needed, yohimbine (2 mg/ml) 0.3 ml/cat may be administered IM or IV; another dose may be given after 30 minutes if results are inadequate. If additional anesthetic time is needed, isoflurane should be given via facemask. Some drawbacks to administering TKX are poor postoperative pain control, decreases in body temperature and blood pressure, and prolonged periods of sedation (i.e., cats may remain sedated until the following morning).[5] Use of a lower dose of TKX for immobilization and administration of gas anesthesia by mask may shorten the recovery time but may also increase the safety risks to personnel.

Another cocktail that may be used is KDT (ketamine, medetomidine, and butorphanol [Torbugesic, Wyeth]). This agent is prepared by combining 10 ml ketamine (100 mg/ml), 1.0 ml medetomidine (1 mg/ml), and 3 ml butorphanol (10 mg/ml) in an empty 15-ml vial. An average-sized cat requires 0.6 ml of KDT IM; slightly more or less may be given depending on the cat's weight. Reversal is accomplished with atipamezole hydrochloride (Antisedan,

[d]Kittens must be at least 3 months of age to go through many TNR programs because only then can they get a legally valid rabies vaccine.

Tips for Caring for Trapped Feral Cats[a]

- For the safety of all concerned, feral cats should be left in their traps during their stay at the practice – whether it is for a day or several days. **Do not attempt to transfer a feral cat to a cage unless the cat is in an appropriate feral cat den or carrier.**
- **Feral cat traps should be 36 inches long and be covered with a light cotton sheet.** Contrary to misconceptions about this type of confinement being inhumane, feral cats prefer tight, dark spaces and become frightened in large, open ones. Therefore, the trap will help the cat feel more secure and hidden.
- **The trap should be cleaned and fresh food and water provided twice daily.** Use caution when performing these tasks.
- **To get a cat to move from one end of the trap to the other, remove the sheet from the end the cat needs to vacate.** This action should send the cat to the other end of the trap in search of cover. If it does not, poke the cat gently with a trap divider or dowel, or give the trap a little shake.
- **To confine a cat to one end of the trap, lower a divider through the bars from above and then a second divider right behind the first,** also from above. Two dividers should be used because an aggressive cat can push aside the tongs of a single divider and escape, especially if the divider is not inserted correctly. For an even greater margin of safety, lower one divider from the top and insert the second one horizontally through the trap from the side.
- While the cat is isolated in the rear of the trap, line the floor of the front end with newspaper using the trap door for access. Next, isolate the cat in the front of the trap and line the floor of the back end using the rear door for access. **Spreading newspaper on the floor of the trap is more effective than using regular cat litter and a pan,** which the cat will most likely use to create an even bigger mess.
- After isolating the cat at the clean end of the trap using dividers, **provide dishes with food and water at the other end.** Providing these items last will keep the cat from spilling them while the other end of the trap is being cleaned.

[a]Adapted from Neighborhood Cats: Information/How To. Accessed June 2006 at www.neighborhoodcats.org.

Pfizer Animal Health, 5 mg/ml) at a dose of 0.2 ml/cat IM. Use of this agent may require buprenorphine to be given postoperatively for pain control.

How to Deliver Anesthesia

Because feral cats should never be handled while they are awake and because of the escape risks involved in transferring cats from one container to another, it is best to inject the anesthetic agent into the cat between the wires of the trap. To accomplish this task, the covered trap is placed on an examination table with the trap door facing up. A long, slender wooden dowel is then passed into the trap toward the cat. When the cat backs away from the dowel and presses its hind end against the side of the cage, the intramuscular injection can be given. Trap dividers may be used instead of a dowel to confine the cat at one end of the trap.

INITIAL ASSESSMENT AND PROCEDURES

Checking for Identification

On initial examination, cats should be scanned for microchips and checked for tattoos to determine whether they are owned and may have been trapped inadvertently.[b] If the veterinarian finds a microchip or tattoo, he or she should attempt to reach the cat's owner (sometimes it is impossible to locate the owner even if the cat has a microchip). It is the responsibility of each veterinary professional to find out what the identification standards are in his or her area for a TNR program. If the policy is to tattoo the cat, the equipment must be sterilized after each use to prevent transmission of disease.

Ear Tipping

During preparation for surgery, the tip of the cat's ear (usually the left ear) should be surgically removed (this practice is known as *ear tipping*). The silhouette of a tipped ear can be seen from a distance and is the recognized symbol of a sterilized feral cat. When choosing which ear to tip, the local standard should be [illegible] example, in California and Oregon, the right ear is tipped.

Ear tipping is important because an ear-tipped cat that is retrapped can be released immediately. Dr. Levy tips the ear of every cat brought to her feral cat clinic, even if there are plans to find a home for the cat.[b] In her experience, such plans often fall through and the cat returns to the outside world without a tipped ear. On the other hand, Dr. Levy has never had a tipped ear interfere with an adoption.

Ear tipping is performed as follows:

- Swab the ear with antiseptic, and place a straight hemostat across the pinna.
- Using sterile sharp scissors or a laser, remove the top ¼ inch of the pinna in a straight line. Removing too much of the pinna results in an ear that looks cropped, which may be undesirable to the caretaker; removing too little makes identification from a distance difficult.
- Keep the hemostat in place for a few minutes to allow time for clotting.

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Oozing of blood from the pinna can be controlled with styptic powder or surgical glue. Notching should not be substituted for tipping because notched ears may resemble ears tattered by fighting.

If it is apparent that the cat is a stray, Dr. Levy still tips the cat's ear.[b] In the handful of cases in which an owner did appear later and complained about the ear tipping, the program (in this case, Operation Catnip) was protected because local ordinances require all cats to wear a rabies tag and to remain on their owner's property.

SPAYING AND NEUTERING

A long-lasting antibiotic, such as penicillin G benzathine–penicillin G procaine, may be given subcutaneously before surgery. An eye lubricant that does not contain an antibiotic should be applied to the eyes to protect them and prevent them from drying out.

Spaying

Ideally, feral cats should be spayed only by an experienced surgeon capable of sterilizing the patient in a short time. Ventral midline or left lateral flank incisions should be small. Intradermal sutures should be used instead of skin sutures so that the cat does not pull them out. Dissolvable sutures may be used internally, and surgical skin glue may be used externally. Another option is to use 5-0 stainless-steel wire to close the linea. The wire is easy to use, will not untie, and causes little tissue reaction. Cats are less likely to disrupt these incisions, whereas gut sutures in the subcutaneous layer may cause inflammation and encourage chewing.

A left lateral flank approach allows the caretaker to monitor the cat's incision from a distance, and, if dehiscence occurs, evisceration is less likely. A major disadvantage of this approach, however, is the inability to explore the abdomen if intraoperative complications occur or if confirmation of a previous spaying is needed. Although a flank approach is appropriate for lactating queens, it is not recommended for pregnant cats because this approach is too small. For these cats, the ventral midline approach should be used.

According to Dr. Levy, half of all female feral cats will be pregnant in the spring.[6] Therefore, the practice should schedule longer surgery times during this season so that staff will have time to deal with a pregnancy if it is discovered during surgery. Cats that are pregnant or dehydrated should receive 100 to 150 ml of fluids SC. If kittens are near term, the uterus can be removed and injected with euthanasia solution. Euthanasia is selected for many reasons, including the large number of pregnant cats in the spring, the difficulties of fostering a feral mother cat while her kittens are being raised, and the poor chances of recapturing feral kittens if the pregnant mother is released. Because it is unlikely that the staff will be able to contact the caretaker if a pregnancy is discovered during spaying, all caretakers should be provided with guidelines explaining the practice's policy with regard to pregnant cats and should sign a written agreement before leaving a cat for TNR.

Neutering

Dr. Levy has found that 2% of male feral cats are cryptorchid.[6] These cats require surgery to remove the retained testicle because it can still produce testosterone, which contributes to objectionable behavior such as spraying and fighting. The technician preparing a cryptorchid cat for surgery should attempt to determine if the retained testicle(s) is palpable in the inguinal or abdominal region. Inguinal testicles can be retrieved via a small skin incision. Cats with abdominal testicles, however, need to be prepared as for a spay (extending the prepared area to include the inguinal and scrotal area). It should be noted that bilateral cryptorchid cats look like neutered cats. The penis can be exteriorized to look for penile spines, which regress in neutered cats but are present in cats with a source of testosterone.

Innovative Shelter Medicine Programs

In the first year of the University of Florida's new shelter medicine program, veterinary students spayed and neutered more than 200 feral cats. The shelter medicine program is a clinical rotation in which veterinary students learn about the special problems – including infectious diseases, abuse, and overpopulation – faced by animals in shelters and in the care of rescue groups. Students spend 3 days at the veterinary school; on the other 2 days, they travel to the Alachua County Animal Services shelter, where they perform spaying and neutering procedures on and administer heartworm treatment to rescued animals being prepared for adoption. As part of the shelter medicine program, students learn how to work safely with feral cats in TNR programs. When these students graduate, they will take their knowledge of feral cat medicine with them throughout the United States.

In addition to the program at the University of Florida, shelter medicine is also part of the curriculum at Cornell; University of California, Davis; Auburn; Iowa State; Oklahoma State; Ohio State; and the University of Pennsylvania. The University of Florida, Auburn, North Carolina State, Texas A&M, and the University of California, Davis, are among a handful of veterinary schools that sterilize feral cats from their campuses or for their communities.

POSTSURGICAL TREATMENT

A broad-spectrum dewormer should be given and an external parasite control administered. In addition, a one-time application of an ear mite product may be applied. According to Dr. Levy, it is important to control fleas and internal parasites in kittens because they are more vulnerable to these organisms than are adults.[b] However, care must be taken when treating kittens with certain products because it can be tricky to properly dose such small amounts of drugs, and overdosing can result in toxicity.

Some practices administer an FVRCP (feline viral rhinotracheitis, calicivirus, panleukopenia) vaccine; others forgo this step to avoid further stressing the cat and because they feel the cat is unlikely to receive the booster recommended by the vaccine's manufacturer. However, a study by Dr. Levy[1] showed that cats that were retrapped 2 to 3 months after receiving a live-virus or inactivated FVRCP vaccine and an inactivated rabies vaccine had outstanding immune responses. Therefore, she believes that a cat that is vaccinated as an adult will have long-term protection against infection. Dr. Levy strongly recommends vaccinating feral cats with an FVRCP vaccine as well as a rabies vaccine if the TNR program can afford it.[b] Vaccines should be given after surgery because an adverse reaction (e.g., anaphylaxis) will more likely be noticed when the animal is waking up rather than while it is under anesthesia.[1]

Any decayed teeth should be removed after surgery. Any wounds or ear and eye infections should also be treated. Drains should not be placed because recapturing the cat for drain removal is unlikely. Dissolvable sutures should be used to close any wounds.

Although NSAIDs have been gaining popularity for pain control in cats, these agents may predispose feral cats to acute renal failure if they are hypotensive from anesthesia, dehydrated, or debilitated. Narcotics (e.g., buprenorphine) provide the best postsurgical pain control in feral cats.

TESTING FOR FeLV AND FIV

If the TNR program has the resources, feral cats may be tested for FeLV and FIV. The TNR program's policy on how to handle cats that test positive should be explained in the agreement/release form. The incidence of these diseases in feral cats is only about 4%,[1,7,8] similar to that in the owned cat population. According to the American Association of Feline Practitioners 2004 position statement on free-roaming and abandoned cats, "Services can be prioritized if your resources are limited. The largest feral cat programs offer only sterilization, ear-tipping, and rabies vaccination on the premise that effective cat control will also reduce the transmission of infectious diseases."

The health status of a feral cat should be determined after the cat has been anesthetized and examined thoroughly. Animals with injuries or illnesses that cannot be entirely treated at sterilization or during confinement afterward should be euthanized through an intravenous injection.

CARING FOR KITTENS

Ideally, feral kittens younger than 8 weeks of age should be socialized and homed. Older feral kittens may bond to the person who tames them but be wary of others and therefore may require a special adopter. Feral cats and kittens usually get along with other cats and should be placed in homes in which another cat lives or be adopted in groups of two or more. Feral kittens that cannot be socialized due to lack of resources can be returned to the colony after sterilization.

Prepubertal sterilization may be performed on kittens weighing at least 2 lb. It is important to check local and state laws before administering rabies vaccinations. Because of their high susceptibility to disease, kittens should be vaccinated against panleukopenia, herpesvirus, and calicivirus with live-virus vaccines, which provide faster immunity with a single vaccination than do inactivated vaccines.

RECOVERY

After surgery, cats should be returned to their traps, which should be clean and have the bottom lined with paper to provide insulation and

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protection. The traps should be placed on a thick plastic drop cloth to catch any waste that escapes from the traps, and the traps should be covered with a sheet to reduce stress. Cats are generally in sternal recumbency within 2 hours and may try to escape or bite; therefore, extreme caution must be used when feeding them or changing soiled newspaper. Timid cats may be encouraged to eat if their traps are positioned so that food and water bowls are near the wall. Feral cats should not be kept in a ward that routinely houses owned cats.

When they are fully conscious, cats that are not to be hospitalized overnight should be released with discharge instructions to their caretakers. The cats should be held in a warm, quiet, dry garage or other protected area until fully recovered (generally overnight). Recommended holding times for male cats vary from as soon as fully ambulatory to 48 hours; female cats may need 24 to 48 hours (or less for mothers nursing kittens). Cats frequently are not fully recovered until the following morning; however, caretakers should be encouraged to contact the practice if a cat is not fully conscious after a designated time. Cats should be fed a meal when they are fully awake and another one before their release. Since many cats are too scared to eat while in the trap, just releasing them is the best approach. Kittens should be fed when awake and should not be fasted more than 4 hours before surgery because they do not tolerate fasting well.

Feral cats should be returned to their original location as long as it is safe for them to live there (e.g., they should not be returned to a building that will be demolished or to an area that is being developed) and the potential negative impact on wildlife is minimal. Relocating colonies is a difficult process and should not be attempted unless absolutely necessary.

CONCLUSION

It is important for veterinarians and their staff to not only learn how to work with feral cats and their caretakers but also understand why they should. It is critical that communities provide adequately funded neutering assistance programs for low-income pet owners and feral cat colony caretakers and that animal shelters sterilize pets before they are adopted.

Client education and the veterinary community's participation in TNR programs are essential to reducing the number of cats in feral colonies. By educating cat owners about the reproductive capabilities of their pets, the importance of sterilizing their cats before they produce even one litter, the need to keep their cats indoors, and the importance of providing identification for their cats, the veterinary community can greatly prevent suffering and improve the quality of life for all cats.

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Cessna, Linda

From: David Young [davidryoung@linkline.com]
Sent: Monday, December 18, 2006 2:42 PM
To: lcessna@torrnet.com
Subject: Peer Reviewed Feral Cat Studies #1 from the Humane Society

Linda,

I'm going to send the articles in several emails so I don't crash your computer <smile>.
I hope these materials are helpful to you. Please see the attached.

David Young

Analysis of the impact of trap-neuter-return programs on populations of feral cats

Patrick Foley, PhD; Janet E. Foley, DVM, PhD; Julie K. Levy, DVM, PhD, DACVIM; Terry Paik, DVM

Objective—To evaluate 2 county trap-neuter-return (TNR) programs for feral cat population management via mathematical modeling.

Design—Theoretical population model.

Animals—Feral cats assessed from 1992 to 2003 in San Diego County, California (n = 14,452), and from 1998 to 2004 in Alachua County, Florida (11,822).

Procedure—Data were analyzed with a mathematical Ricker model to describe population dynamics of the feral cats and modifications to the dynamics that occurred as a result of the TNR programs.

Results—In both counties, results of analyses did not indicate a consistent reduction in per capita growth, the population multiplier, or the proportion of female cats that were pregnant.

Conclusions and Clinical Relevance—Success of feral cat management programs that use TNR can be monitored with an easily collected set of data and statistical analyses facilitated by population modeling techniques. Results may be used to suggest possible future monitoring and modification of TNR programs, which could result in greater success controlling and reducing feral cat populations. (*J Am Vet Med Assoc* 2005;227:1775–1781)

Populations of feral cats are large, have high intrinsic rates of growth, and are highly adaptable to different and sometimes harsh habitats. Feral cats often are regarded as pests on the basis of their predatory habits and the negative effect they may have on wildlife populations.[1-4] They may function as hosts for diseases and vectors that can infect humans, domestic animals, or wildlife[5-7]; yet, colonies of feral cats often are maintained through feeding and care by people who have strong affection for these cats.[8]

There have been many attempts to eradicate populations of feral cats or to regulate their population sizes at low numbers. Such projects have included intentional release of panleukopenia virus, poisoning, predator introduction, euthanasia, and neutering.[9-13] Often, despite intense effort, attempted control programs fail because growth rates within the population do not decline or because of additional recruitment of cats into the population, although some programs have reported[14-16] successful reduction in feral populations with humane trapping programs. The general public often finds extermination programs for feral cats unacceptable, yet also often is intolerant of cat predation on wildlife. It has proven difficult to assess program success; theoretical models would be helpful to guide interpretation of data from control programs and to provide motivation for changes that could increase success.

Feral cats are territorial animals, and their highest potential for population increase occurs when populations are low. The maximum per capita rate of increase is the maximum mean number of female cats produced annually from each female cat, including the [illegible] female kittens. A cat population size tends [illegible] until a carrying capacity is reached. This carrying capacity depends mainly on food and appropriate area for territories. After the carrying capacity has been reached, density dependence forces the per capita growth rate to drop to 0. Matrix methods are used to study the sensitivity of long-term population growth rates to perturbations in survivorship and fecundity and have been used to evaluate feral cat population dynamics.[17] By use of a logistic (Ricker) model to lower feral cat populations, 2 general approaches are possible: the carrying capacity can be decreased (eg, by discouraging public feeding of feral cats), or the maximum per capita rate of increase can be lowered (eg, by increasing mortality rate[18] or by neutering female cats). For feral cat populations to decline, the maximum per capita rate of increase needs to decrease to < 0. Temporarily lowering the population size below the carrying capacity yields no long-term population reduction if this is not accomplished. The cat population will simply increase back to carrying capacity.

The objective of the study reported here was to use data from 2 trap-neuter-return (TNR) programs to evaluate development and implementation of models that could determine program success and calculate the rate of neutering needed to decrease the feral cat population.

Materials and Methods

Modeling—Statistical analyses and modeling were performed with computer software.[a,b] For all statistical tests, a value of $P < 0.05$ was considered significant. Cat population regulation was modeled on the basis of a Ricker model:

$$R_t = e^{r_m(1-\frac{N_t}{K})}$$

where R_t is an annual population multiplier or net fundamental reproductive rate, r_m is the maximum per capita rate of increase, N_t is the population size at time t, and K is the carrying capacity. If $R_t = 1$, the net annual growth of

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Address correspondence to Dr. J. Foley.

the population r_t is 0 (ie, the population size is multiplied by 1.0).

To apply the model to TNR data, results from trapping were inserted into the model as index values (linear multipliers of the actual values) and interpreted with the assumption that trapped cats represented some fraction of all cats in the county; this fraction was divided into an index value (eg, the index carrying capacity) to yield an estimated county-wide value. The county-wide feral cat population size was approximated; there were 1,040,149 households in San Diego County in 2000, of which 8.9% of those interviewed reported that they fed a mean of 2.6 feral cats/household.[19] Thus, a minimum county-wide estimate of feral cat population size for 2000 was 240,690 feral cats. In Alachua County, 12% of interviewed households reported that they fed a mean of 3.6 feral cats each. There were 84,963 households in 1999 and approximately 36,398 feral cats.[20]

Estimates of feline population growth rate (R_t) were obtained from the trapped cat data. The R_t was calculated as follows:

$$R_t = N_{t+1}/N_t \text{ and } r_t = \ln R_t$$

where N_t and N_{t+1} are indices of the actual population size, equal to the total number of cats neutered at clinics for that year. It was not necessary to estimate either K or N_t directly because the growth rates describe population trajectories independent of absolute or index values of population size and carrying capacity. The regression of per capita growth rate on population size provided the estimate of maximum per capita rate of increase (y-intercept) and, for convenience, an index of carrying capacity (x-intercept).[21] The actual carrying capacity was obtained by multiplying the index carrying capacity by the estimated total feral cat population in that county and dividing by the total cats trapped.

Program success was evaluated with several methods. Evidence for density-dependent population regulation was sought by plotting per capita growth rate as a function of year to determine a significant reduction in per capita growth rate as detected by a significant negative linear regression of per capita growth rate on time. Similarly, evidence of reduced fecundity was sought by use of linear regression for the proportion of female cats pregnant when neutered over time. The Malthusian parameter r_m (maximum per capita rate of increase) calculated for each county was used to obtain a Malthusian multiplier, $R_m = e^{r_m}$.

Management of feral cat R_m means getting a new value, R_m'. Population decline occurs when R_m' is < 1.0; R_m can be written as the sum of survivorship (p) and offspring production ($R_m - p$). The critical fraction (s) of cats that would need to be neutered in a population to induce a decline can be obtained by solving the following equation:

$$1 = R_m' = p + (R_m - p)(1 - s)$$

to get

$$s = \frac{R_m - 1}{R_m - p}$$

One can also approximate the proportion of cats that must be neutered each year (M) to gradually reach M = s • N neutered cats. Neutered cats accumulate in the population because they survive at rate p from year to year. If the number of cats neutered annually is m and the program continues many years, when neutered individuals are counted right after neutering but before death,

$$M = m\sum_{i=0}^{\infty} p^i = m\frac{1}{1-p}$$

To achieve the neutering level s = M/N, the annual neutering rate s_a must satisfy the following equation:

$$s_a = \frac{m}{N} = s(1 - p)$$

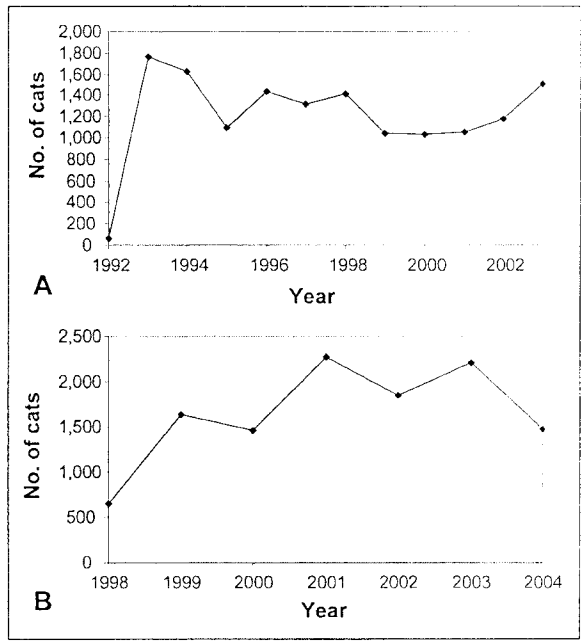

Figure 1—Yearly distribution of all feral cats evaluated for neutering in San Diego County (A) and Alachua County (B).

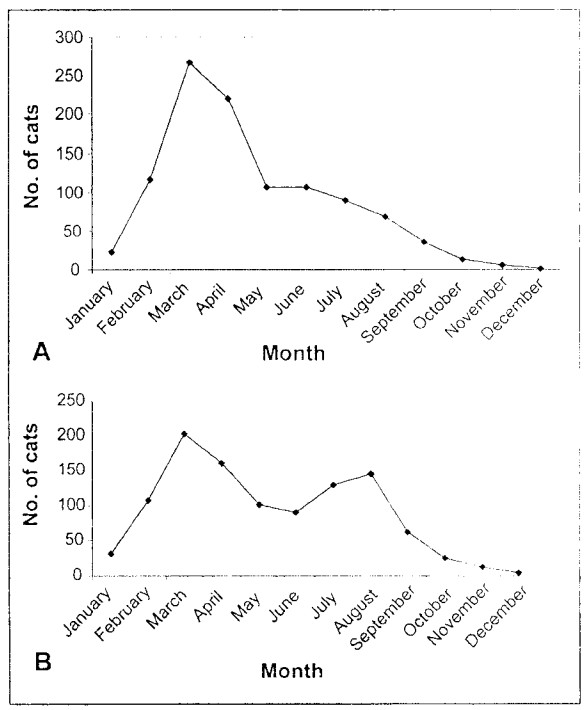

Figure 2—Monthly distribution of pregnant feral female cats evaluated for ovariohysterectomy in San Diego County (1992 to 2003, all years summed [A]) and Alachua County (1998 to 2004, all years summed [B]).

When survivorship (p) is close to 1.0, this is a much lower burden for the neutering program. The calculation is only approximate because N is not constant over the lifetime of the neutering program, survivorship may differ between neutered and non-neutered cats, and cats do not live indefinitely. In the absence of field data, the annual survival rate ($\hat{p}$) can be estimated from the mean cat life span as follows:

$$\hat{p} = 1 - \frac{1}{\text{mean life span}}$$

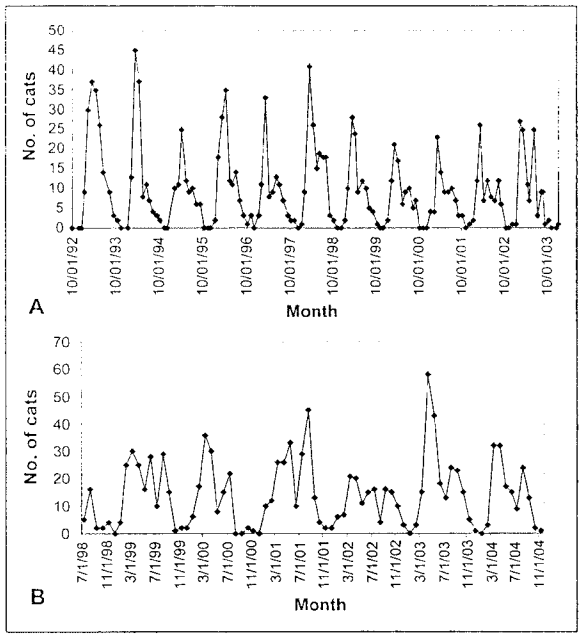

Figure 3—Monthly distribution of pregnant feral female cats evaluated for ovariohysterectomy in San Diego County (1992 to 2003 [A]) and Alachua County (1998 to 2004 [B]).

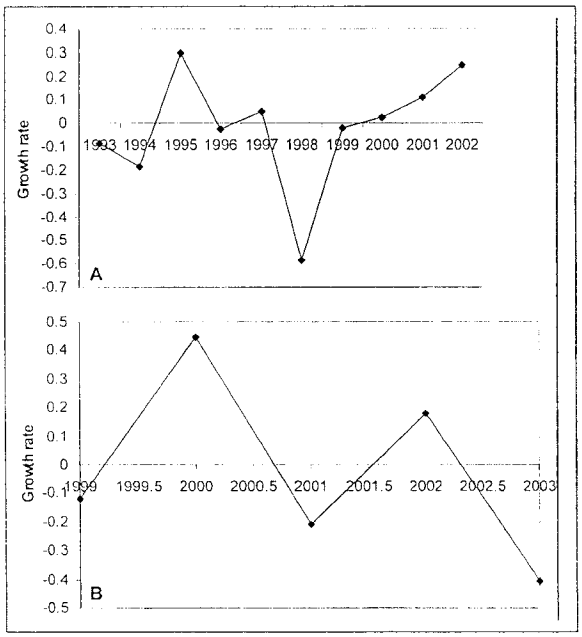

Figure 4—Annual per capita feral cat population growth rate by year for feral cats evaluated for neutering in San Diego County (1992 to 2003 [A]) and Alachua County (1998 to 2004 [B]).

and if such data were available, the life span and annual survival rate should be estimated at low population sizes.

Data—Data from the Feral Cat Coalition were acquired during a trapping program involving volunteers from across San Diego County, California, from 1992 to 2003 and from a similar program from 1998 to 2004 run by Operation Catnip Inc in Alachua County, Florida. Cats were live-trapped, transferred approximately once per month to participating veterinary clinics, examined, vaccinated, surgically neutered, and returned to their colonies after a short postoperative recovery period. For each day that clinics were held, data compiled included clinic number and date, location of the clinic, number of males neutered, number of females neutered, number of cats already neutered when trapped, and total females subdivided into the categories pregnant and not pregnant. Data regarding San Diego County demographics were obtained from the California Department of Finance[18] and included number of humans in the county and number of households. For Alachua County, demographic data were obtained from the US Census Bureau. Data regarding cat ownership, feeding of feral cats, approximate county-wide cat numbers, and number of feral cats were obtained or calculated from published surveys of San Diego and Alachua County households.[19,20]

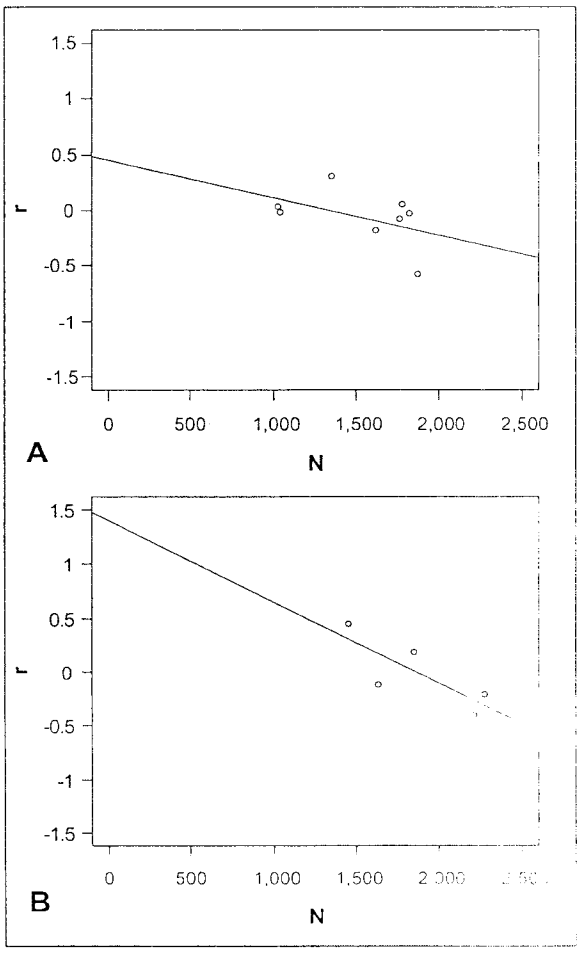

Figure 5—Regression of annual per capita growth [illegible] index population size (N) for feral cats evaluated for neutering in San Diego County (1992 to 2003 [A]) and Alachua County (1998 to 2004 [B]).

Results

Feral cat demographics—From 1992 to 2003, 14,452 cats were submitted as feral cats to veterinary clinics in San Diego County for neutering (**Figure 1**; data for 1992 represent only part of the year, when the program began). Of these cats, 565 (4%) had already been neutered; 14,129 surgeries were performed on 6,494 (46%) male and 7,635 (54%) female cats. The number of cats neutered over the months of the year did not vary significantly ($P = 0.13$), but the presence of pregnant cats was strongly seasonal, with numbers increasing in spring, compared with winter and fall (Figures 2 and 3). Overall, 17.2% of trapped female cats were pregnant.

In Alachua County, 11,822 cats were submitted for neutering from 1998 to 2004 (Figure 1). Of these, 258 (2%) cats had previously been neutered; 11,564 surgeries were performed on 4,928 (43%) male and 6,636 (57%) female cats. Evaluation of pregnant cats revealed a double peak, with increases in March and August (Figures 2 and 3). Sixteen percent of trapped female cats were pregnant.

Model results—Per capita growth rate in San Diego County ranged from –0.58 to 0.30, with a value of 0.25 for 2002 (**Figure 4**). Values for Alachua County were similar. Regressing per capita growth rate on population size yielded estimates of the index carrying capacity (x-intercept) and maximum per capita rate of increase (y-intercept) of 1,323 and 0.45 ($P = 0.09$), respectively, for San Diego County and 1,855 and 1.41, respectively, for Alachua County ($P = 0.1$; **Figure 5**). In the last year of data for each county, the total numbers of trapped cats were 1,514 (0.63% of the total estimated feral cats) in San Diego County and 2,213 (9.6%) for Alachua County. Thus, the county-wide carrying capacities were estimated as 210,325 and 19,3[illegible]

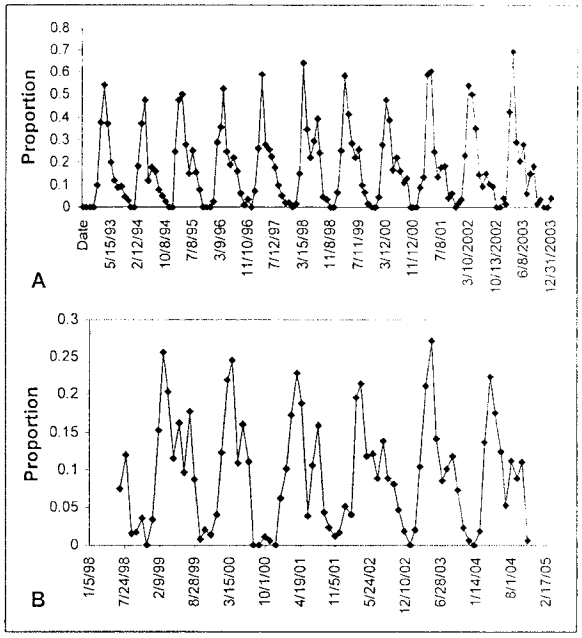

Figure 6—Monthly distribution of pregnant feral female cats evaluated for neutering in San Diego County (1992 to 2003 [A]) and Alachua County (1998 to 2004 [B]).

Table 1—Critical overall neutering rate required to bring growth rate in a feral cat colony to 1.0 for various growth rate, life span, and survivorship (p) estimates.

	Mean life span (y)											
Growth rate and p	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**
p	0.00	0.50	0.67	0.75	0.80	0.83	0.86	0.88	0.89	0.90	0.91	0.92
1.0	0	0	0	0	0	0	0	0	0	0	0	0
1.5	0.33	0.50	0.60	0.67	0.71	0.75	0.78	0.80	0.82	0.83	0.85	0.86
2.0	0.50	0.67	0.75	0.80	0.83	0.86	0.88	0.89	0.90	0.91	0.92	0.92
2.5	0.60	0.75	0.82	0.86	0.88	0.90	0.91	0.92	0.93	0.94	0.94	0.95
3.0	0.67	0.80	0.86	0.89	0.91	0.92	0.93	0.94	0.95	0.95	0.96	0.96
3.5	0.71	0.83	0.88	0.91	0.93	0.94	0.95	0.95	0.96	0.96	0.96	0.97
4.0	0.75	0.86	0.90	0.92	0.94	0.95	0.95	0.96	0.96	0.97	0.97	0.97
4.5	0.78	0.88	0.91	0.93	0.95	0.95	0.96	0.97	0.97	0.97	0.97	0.98
5.0	0.80	0.89	0.92	0.94	0.95	0.96	0.97	0.97	0.97	0.98	0.98	0.98

Table 2—Critical annual neutering rate required to bring growth rate in a feral cat colony to 1.0 for various growth rate, life span, and p estimates.

	Mean life span (y)											
Growth rate and p	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**
p	0.00	0.50	0.67	0.75	0.80	0.83	0.86	0.88	0.89	0.90	0.91	0.92
1.0	0	0	0	0	0	0	0	0	0	0	0	0
1.5	0.33	0.25	0.20	0.17	0.14	0.13	0.11	0.10	0.09	0.08	0.08	0.07
2.0	0.50	0.33	0.25	0.20	0.17	0.14	0.13	0.11	0.10	0.09	0.08	0.08
2.5	0.60	0.38	0.27	0.21	0.18	0.15	0.13	0.12	0.10	0.09	0.09	0.08
3.0	0.67	0.40	0.29	0.22	0.18	0.15	0.13	0.12	0.11	0.10	0.09	0.08
3.5	0.71	0.42	0.29	0.23	0.19	0.16	0.14	0.12	0.11	0.10	0.09	0.08
4.0	0.75	0.43	0.30	0.23	0.19	0.16	0.14	0.12	0.11	0.10	0.09	0.08
4.5	0.78	0.44	0.30	0.23	0.19	0.16	0.14	0.12	0.11	0.10	0.09	0.08
5.0	0.80	0.44	0.31	0.24	0.19	0.16	0.14	0.12	0.11	0.10	0.09	0.08

respectively. The calculated values for R_m for each county were 1.57 for San Diego County and 4.1 for Alachua County.

Critical neutering rates depend on R_m and survivorship (Tables 1 and 2). Reported[9,23] mean life spans in feral cats range from 2 to 8 years. By use of a median life span of 5 years for San Diego County, the critical neutering fraction (s) would be approximately 71% (94% for Alachua County). The needed annual neutering fraction (s_a) was 14% for San Diego County and 19% for Alachua County. Hypothetical feral cat populations would decrease between these values.

To assess the success of the TNR program, data were evaluated for density-dependent population regulation and a significant reduction in the proportion of female cats that were fertile. When per capita growth rate was regressed on year, there were no indications of a significant reduction in per capita growth rate (ie, evidence for density dependence) in either of the counties ($P = 0.24$ and 0.1 for San Diego and Alachua counties, respectively; Figure 4). The proportion of pregnant females cycled annually, but an overall reduction in either of the counties was not detected (Figure 6).

Discussion

Feral and stray cats represent more than 40% of all cats in the United States, are fed by an estimated 10% to 20% or more of households, and are rarely neutered.[20,24,25] It is desirable to reduce feral cat populations because of welfare concerns for the cats, concern about the effects of feral cats on vulnerable wildlife, and public health considerations. The American Association of Feline Practitioners supports appropriately managed feral cat colonies, but that group's position statement indicates that the goal of colony management should be the eventual reduction of the colony.[24] Additionally, feral cat colonies should not be located near at-risk wildlife. Although several control methods including TNR have been proposed and implemented, assessment of their efficacy has typically been missing or at most anecdotal. This is unfortunate given the substantial investment of resources required to run an effective program and the skepticism with which TNR is regarded by many people.

Feral cat populations are extraordinarily capable of reaching local carrying capacities as a function of reproductive mechanisms that emphasize breeding efficiency. These include induced ovulation, weaning of kittens as young as 50 days old, an age of first reproduction as early as 8 months, and many (approx 130) days pregnant per year.[9,26] Consequently, cats have some of the highest maximum per capita rates of increase among carnivores, estimated in 1 study[27] at 23.3%. Population sizes, home range size, and local carrying capacity of feral cats all vary extensively, depending on habitat type and availability of food and safe den sites. Intrinsic control of feral cat populations may occur by density-dependent mechanisms including starvation, predation, control of reproductive success, and disease. Although cats, particularly males, are territorial,[28,29] feral cat colonies receiving abundant food supplementation may have a reduction in apparent territoriality as cats co-occupy territories or attempt to maintain small territories (sometimes accompanied by stress and fighting).[30]

The purpose of TNR programs is rarely articulated in the language of population ecology but often is motivated by an attempt to reduce population size (N_t) and per capita growth rate (r_t) by reducing reproduction. Additional goals of TNR may include provision of veterinary care and vaccines to reduce the threat of feline and zoonotic diseases, improve the quality of life of homeless cats, avoid euthanasia as a control method, and, in some programs, reduce the population size.[31] In many TNR programs, including those described here, direct assessment of possible changes in population size is not possible because data collection and population structure do meet assumptions of capture-recapture or other similar methods of estimating population size. Although index values were necessarily used for parameters because actual population counts were not available or practical, the trajectories of populations (whether or not populations were declining) could be determined from calculation of maximum per capita rate of increase without accurately detecting population size or carrying capacity.

The models reported here also have the flexibility of providing statistics that could be used to evaluate success of control programs, methods for calculating the fraction of cats that must be neutered to force population decline, and the annual neutering rate required to eventually achieve the required neutered fraction. The assessment statistics are R_m (multiplier for the maximum per capita rate of increase), which can be calculated from the time series and, as a multiplier, must be < 1.0 for the population to be in decline; the proportion of cats that are pregnant, which should be declining significantly in a successful program; and the proportion of trapped cats that already are neutered, which should increase. This last statistic was not evaluated in the data given here because the TNR programs specifically avoided retrapping cats, which was unfortunate because keeping account of previously ear-tipped cats would have made the calculation of the proportion neutered more accurate.

The present study yielded mixed results regarding the success of large TNR programs in San Diego and Alachua counties. Results of the programs had previously been summarized[16] regarding the number of cats neutered, but the effect of neutering on the free-roaming cat population had not been analyzed. Our analysis indicated that any population-level effects were minimal, with R_m (the multiplier) ranging from 1.5 to 4, which indicated ongoing population growth (similar to values in previous studies), and critical needed values of neutered cats (ie, the proportion of all cats that needed to be neutered to reduce R_m to < 1.0) of 71% to 94%, which was far greater than what was actually achieved. There are several potential limitations to the data; the net reproductive rate was estimated under the assumption that trapping effort and efficiency were unbiased across sites and trapping periods. Retrapping success for feral cats probably was underestimated because cats were marked after neutering by removal of a small distal portion of the pinna and ear-tipped cats usually were released from cages without count-

ing. The estimate of total numbers of feral cats was somewhat inaccurate because it was calculated from general surveys of how many people feed how many feral cats. However, this statistic was not used in the model itself but rather provided an estimate of the calculated proportion of all available feral cats that were being neutered, to allow for interpretation of model successes. The regression of per capita growth rate on population size was not significant for either San Diego or Alachua counties, possibly reducing confidence in the estimate of population growth rates. However, this was not surprising given that a time series of at least 20 years is typically required before such a regression is found to be significant.[32] Nevertheless, the coefficient of regression (y-intercept) still represented the maximum likelihood estimator for maximum per capita rate of increase.

In some ways, results were similar to those obtained in an earlier, stage-structured matrix model of feral cat demographic features.[17] The matrix model forced $\lambda < 1$, analogously with the Ricker model forcing $R_m < 1$, for the population to decline. Implementation of the stage-structured model suggested that no plausible combinations of life history variables would likely allow for TNR to succeed in reducing population size, although neutering approximately 75% of the cats could achieve control (which is unrealistic), a value quite similar to results in the present study. An important distinction between the 2 models was the incorporation of density-dependent reduction of fecundity and possible saturation of the population with neutered cats in the present model.

Feral cat control programs are notoriously difficult, and in many cases, short-term control has been followed by a long-term return to precontrol conditions. Attempted control of a feral cat population on Marion Island in the Indian Ocean had poor success for many years.[9] The population size on the island was estimated by use of a line transect at approximately 2,200 cats, and in 1979, virulent panleukopenia virus was released on the island. Although in 1 study[9] it was concluded that the population density of cats had declined, this conclusion was based on questionable statistical analyses. Within 5 years, intrinsic population growth rates were reported to have increased 4 times, and although population sizes had supposedly declined, predation on seabirds continued. Hunting was instituted, and ongoing population estimates were assessed by use of the highly biased index of cat sightings.[10] The authors acknowledged that control (ie, suppression) would only succeed with ongoing intensive hunting. Feral cats have been eliminated from at least 48 islands, including Marion Island, primarily through hunting (sometimes with dogs), trapping, poisoning, and disease and typically on fairly small islands with low cat density.[33]

In contrast with hunting, disease, or other methods of feral cat control that increase mortality rates, TNR has the potential advantage of allowing niches to become saturated with neutered individual cats. If, concurrently with the reduction in maximum per capita rate of increase, carrying capacity is reduced (typically by reduction of food oversupplementation) and immigration is controlled, there may be a humane, gradual reduction in overall cat numbers. Future feral cat management programs could potentially achieve better success with a few modifications of the TNR paradigm. Despite the substantial expenditure of resources to operate the 2 TNR programs described here, they probably were performed on too large a scale; many cats were neutered, but this constituted a very small overall proportion of the cats. Moreover, feral cats within a county surely do not constitute a single population, further diluting the enormous overall effort into numerous smaller efforts with less impact. Trap-neuter-return programs should be focused on well-defined, preferably geographically restricted, cat populations, rather than diluting effort across multiple populations. In future TNR studies, it would be helpful if trapping efforts were standardized to allow for the least biased index estimates of population size from trapping efficiency (catch per unit effort[34]), although with such an intelligent species, cats may modify behavior after experience with the traps. If population growth actually is declining, then per capita growth rate should decline consistently. Also, retrapping statistics, which were not obtained in these programs, are particularly valuable because they allow for comparison of observed retrapped (neutered) proportions with the critical proportions needed to reduce R_m to < 1.0.

Focused TNR programs have had some success. A survey-based assessment[8] of TNR for small colonies (mean, 7 cats) revealed moderate success, with reduction of mean colony size by as much as half. A two-thirds reduction in population size was obtained in a feral cat colony on a university campus where every cat was specifically included in the census.[7] Although causes of loss from the population included euthanasia of sick cats, adoption, and deaths (often vehicular trauma), increases in population were attributable to immigration but not births because virtually all resident cats were neutered. For these programs, managers were able to evaluate success because every cat could be counted. In larger programs, such enumeration is impossible and index-level assessment, such as that described here, becomes necessary.

Statistical assessment of the impact of TNR programs on population size is critical to help gain credibility for such programs. Because of the increasing will to address humane, conservation, and public health concerns associated with free-roaming cats, tools to evaluate program success will increasingly contribute to achieving management goals.

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

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Objective—To evaluate the efficacy of trap-neuter-return and trap-euthanatize management strategies for controlling urban free-roaming cat populations by use of matrix population models.

Design—Prospective study.

Sample Population—Estimates of free-roaming cat populations in urban environments.

Procedure—Data from the literature describing the biology of free-roaming cat populations in urban environments were gathered. A matrix population model was developed with a range of high and low survival and fecundity values and all combinations of those values. The response of population growth rate to a range of management actions was assessed with an elasticity analysis.

Results—All possible combinations of survival and fecundity values of free-roaming cats led to predictions of rapid, exponential population growth. 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. Elasticity analyses revealed that the modeled population was most susceptible to control through euthanasia.

Conclusions and Clinical Relevance—Free-roaming cat populations have a high intrinsic growth rate, and euthanasia is estimated to be more effective at reducing cat populations than trap-neuter-return programs. (*J Am Vet Med Assoc* 2004;225:1871–1876)

Free-roaming cats represent challenges to the veterinary profession and society. Free-roaming cats contribute to a public health hazard through the risk of transmitting rabies and other zoonotic agents.[1-6] These cats may be infected with a variety of feline pathogens and function as a reservoir of infection for owned cats.[1,2,7,8] The welfare of free-roaming cats concerns society because they are frequent victims of vehicular collisions and fights between themselves and other animals.[1,3,5,6,9,10] Cats also are efficient predators, and results of numerous studies[2,3,5,11,12] indicate their detrimental impacts on native wildlife. For example, the British population of 9 million cats has been estimated to be responsible for the deaths of 57 million mammals, 27 million birds, and 5 million reptiles and amphibians per year[11]; because the US cat population has been estimated at 100 million,[12] the potential impact of domestic cats on American wildlife is high. There also are emotional and financial costs to society caused by concern for these cats, their prey, and the attempts to mitigate the perceived and real damages caused by unmanaged populations of free-roaming cats.[6,9,10,13] Despite recognition of the problems, there is no consensus on how such populations should be managed.

Two management schemes predominate. Traditional animal control plans manage free-roaming cats through capture and removal. Whereas some captured cats are returned to their owners or adopted as pets, most are euthanatized as unwanted, excess cats. Traditional animal control is often constrained by resources and rarely sustains active cat population management on a broad scale. A more recently proposed management alternative is to maintain stable, nonbreeding populations. These programs are founded on capturing, neutering, and releasing cats with additional management processes of disease testing, vaccination, feeding, adoptions, and monitoring being components of some programs. Although trap-neuter-return (TNR) programs are presented as an alternative to euthanasia and an effective means of population management,[3,4,6,10,14-17] these programs have not been developed on a large scale, limiting their assessment as a tool for decreasing cat populations. Further, TNR programs are often instituted because of society's aversion to euthanasia as a method of control. Thus, much of the debate surrounding the use of euthanasia or TNR has a substantial emotional component. Therefore, an objective evaluation of TNR and alternative strategies for managing cat populations would make a valuable contribution toward sound management.

Matrix population models are a primary tool used in wildlife management to set annual guidelines on hunting, trapping, and fishing; explore population dynamics; and develop management plans for endangered species.[16-29] These models use estimates of age- or stage-specific vital rates (reproduction and survival) to project future population structure. Analysis of these models allows objective comparison of the efficacy of different management actions and permits identification of key factors influencing population dynamics.[16-20,26]

For our study, published data from studies of urban, free-roaming cat populations were used to parameterize

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a matrix population model[17] and explore how cat populations may respond to various forms of control. The primary objective was to compare the efficacy of TNR programs versus euthanasia programs as methods of cat population management. Because TNR programs affect reproduction and euthanasia programs affect survival, these 2 approaches should be fundamentally different with respect to their impact on the growth rate of cat populations. To address this hypothesis, an elasticity analysis of the matrix population models was conducted to explore how alterations in the estimates of stage-specific vital rates would influence population growth rate. Elasticity analysis is a form of perturbation analysis that allows determination of the rate of change of population growth rate in response to changes in individual vital rates.[17] This allows vital rates to be ranked in order of their influence on population growth.

Materials and Methods

Model description and construction—The matrix population model[31,32] allows classification of the population either by age or stage classes (eg, larva, juvenile, adult). The model advances a given population structure ahead through 1 time interval to a new projected population structure. Through that time interval, reproduction and survival occur within each age or stage class in the population at rates specific to that age or stage class. For instance, young animals, such as juveniles, have a probability of surviving (usually < 1) to the reproductive adult stage, thereby increasing the numbers in the adult stage and decreasing the numbers in the juvenile stage. Similarly, reproduction by different stages at time t would contribute to the number of young present at time $t + 1$. Thus, the survival probabilities and reproductive rates of each age or stage class would contribute to a new population structure at time $t + 1$.

Under this model, changes in population structure are denoted by the equation $n(t + 1) = An(t)$, where n represents a vector of age or stage classes describing the population structure at times $t + 1$ and t, respectively, and the population projection matrix A contains the survival probabilities and reproductive rates acting on the population through each time interval. The dominant eigenvalue of the population projection matrix, denoted by λ, is the intrinsic or asymptotic growth rate of the population. If $\lambda = 1$ there is no net change in the population size. Values > 1 mean that the population is increasing; values < 1 mean that the population is decreasing.[17]

Model parameter estimation—Vital rate data were gathered from published studies of free-roaming cats in urban environments; preference was given to studies of unmanipulated populations. Given the variability of the vital rate data, low and high extremes of parameter estimates and all combinations of those extremes were used in the analysis. The available data were insufficient for an age-structured classification but amenable to a stage-structured model with 2 stages: individuals ≤ 1 year old, called juveniles, and individuals > 1 year old, called adults. This classification of the population model conformed to the level of detail of the management actions that were evaluated. The model time step was 1 year. The model considered only the female population; this is appropriate if the population is not mate-limited or if the vital rates of the 2 sexes are identical.[17]

Reproduction in cats is relatively well documented, and values from the literature were used to develop the model. Fetus number has been reported as mean ± SD of 3.6 ± 0.2 kittens/dam in a program to spay free-roaming cats.[15] This can be conservatively considered a typical litter size and is comparable to values found in other studies.[2,9] Mean number of litters per female per year has been reported to be from 1.1 to 2.1.[10,15] Puberty in female cats varies with time of year of their birth, but first conception has been reported to be at a mean of 212 days of age.[2] Sex ratios are consistently near 50:50.[15]

Based on these values, the fecundity of adult female cats was estimated as a product of kittens per litter, litters per year, and sex ratio at birth. Thus, our low estimate of fecundity was 3.6 X 1.1 X 0.5 = 1.98 female offspring/y; our corresponding high estimate was 3.6 X 2.1 X 0.5 = 3.78 female offspring/y. Juvenile females have reduced mean fecundity because most are prepubertal. This reduction is equal to the factor (365 – 212)/365, which yielded 0.83 female offspring/y to 1.58 female offspring/y for the low and high estimates of juvenile fecundity, respectively.

Survival probabilities have not been as thoroughly documented. In a long-term study,[2] annual juvenile survival was reported as approximately 75%. In another report,[33] it was suggested that annual survival is closer to 50%. Published figures for survival rates of adults include 33% survival over a 42-month period[34] and 67% survival over an 18-month period.[6] Anecdotal reports estimate adult life span of feral cats at 2 to 3 years.

Survival rates were computed under the assumption that the juvenile and adult classes reported in the various studies were consistent with this model's juvenile and adult classes. The low estimate of survival for juveniles was therefore 0.5, and the high estimate was 0.75. Reported survival rates for adults were determined over periods longer than 1 year; annual survival rates were estimated by use of the geometric probability distribution as an approximate discrete lifetime distribution.[35] This method assumes that survival probabilities remain constant over the entire period for which they are being estimated. This assumption may not be true if there are age-dependent effects on survival. For example, if younger adults learn as they age, survival may be enhanced with time, whereas senescence may cause the opposite effect in older adults, reducing survival over time. It is likely that both processes occur, but the available data did not allow us to address this issue. The distribution function for the geometric distribution was $P = 1 - S^t$, where S is the per-time-unit survival rate, and P is the probability that an individual will die by time t. Thus, the expression for S given t and P was $S = exp(ln[1 - P]/t)$.

This expression was used to obtain 4 estimates of annual survival rates for the adult class based on 3 values of P. Calculations based on a 2-year and 3-year life span, assuming that $P = 0.50$, yielded annual survival rates of 0.707 and 0.794, respectively. A monthly survival rate of 0.974 was calculated from a survival probability of 0.33 over 42 months (ie, $P = 0.67$ and n = 42), and this monthly rate was converted to an annual rate of 0.729 (ie, 0.974 to the 12th power). Similarly, a monthly survival rate of 0.978 results from a survival probability of 0.67 over 18 months ($P = 0.33$ and n = 18). This monthly rate converts to an annual survival rate of 0.766 (0.978 to the 12th power). Thus, by use of 4 reported estimates of adult survival, the estimated annual rate of adult survival varied from 0.707 to 0.794. Therefore, the low and high values for adult survival rates used in the model were 0.7 and 0.8, respectively.

Although breeding is skewed towards the first half of the year and only a few litters are born during the months of October through December, cats essentially can breed throughout the year.[2,9,15] Continuously breeding populations are most easily modeled by assuming that all births take place at the midpoint of the time interval.[17] Under this assumption, parental individuals must survive to that midpoint and the resultant offspring must survive through the remaining half of the time interval. Half-year survival rates are equal to the square root of the annual rate. Thus, the matrix elements are as follows:

$$\begin{bmatrix} S_0 \cdot F_0 & \sqrt{S_0} \cdot F_1 \cdot \sqrt{S_1} \\ S_0 & S_1 \end{bmatrix}$$

where S_0 and S_1 are annual rates of survival for the juvenile and adult stage classes, and F_0 and F_1 are the estimates of fecundity for those same stage classes. The composite matrix elements in the top row of the matrix are equal to the stage-specific reproductive rates (R_0 and R_1) for juveniles and adults, respectively.

Model analyses—Analyses were performed with software written in a standard programming language.[a] Intrinsic rates of increase (λ) were calculated with all combinations of high and low fecundity and survival rates. Fecundity was reduced by 10%, 25%, 50%, and 75% to simulate TNR programs of increasing rigor. Trap-euthanatize programs were modeled through several combinations of reductions of juvenile and adult survival by 10%, 25%, 50%, and 75%.

The geometric mean of λ, computed across all combinations of fecundity and survival rates, was used as a summary statistic in assessment of population management strategies. Elasticity analysis was used to provide a broader view of the demographic basis of the effects of the different management strategies. All elasticity values were calculated with a computer program.[30,a]

Uncertainty in vital rate estimates may influence the outcome of computations of the elasticity values. These possible effects may be accounted for by computing elasticity values for a large number of simulated population projection matrices, in which the vital rate values are randomly chosen to lie between predetermined limits. The upper and lower bounds chosen for the vital rates were the high and low estimates, respectively, for each rate.

Results

The high and low vital rate values resulted in 8 possible matrices that each yielded $\lambda > 1$ (Table 1). Population growth rate ranged from a high of 2.49 for the highest estimates of fecundity and survival for both juvenile and adult classes to a low of 1.34 for the lowest combinations. All remaining combinations of parameters led to intermediate intrinsic rates of population increase. The geometric mean of these 8 baseline values of λ was [illegible]

The geometric mean intrinsic rates of [illegible] the matrices simulating a TNR (ie, with reduc[illegible] dity values), even for quite large reductions in fecundity, were still > 1 (Table 2). A 75% reduction in fecundity for all reproductive females (corresponding to ongoing spaying 75% of the female population) yielded $\lambda = 1.08$.

The geometric mean intrinsic rates of increase for the matrices simulating a euthanasia program (ie, with reduced survival values) revealed that reductions of < 25% were not sufficient to lead to predictions of declining cat populations (Table 2). However, reductions in both juvenile and adult survival by ≥ 50% yielded a geometric mean intrinsic rate of increase < 1. A 75% reduction in both adult and juvenile survival led to $\lambda = 0.47$, meaning that a cat population subjected to such a program would be approximately halved every year.

In nearly all scenarios, λ was more sensitive to changes in survival than fecundity (Figure 1). A 25%

Table 1—Baseline population projection matrices used in simulations of free-roaming cat populations and their intrinsic rates of increase (λ). Each scenario corresponds to a different estimate of fecundity and survival.

Scenario	Fecundity	Juvenile survival	Adult survival	Matrix	λ
1	High	High	High	$\begin{bmatrix} 1.189 & 2.928 \\ 0.75 & 0.8 \end{bmatrix}$	2.49
2	High	High	Low	$\begin{bmatrix} 1.189 & 2.739 \\ 0.75 & 0.7 \end{bmatrix}$	2.40
3	High	Low	High	$\begin{bmatrix} 0.792 & 2.391 \\ 0.5 & 0.8 \end{bmatrix}$	1.89
4	High	Low	Low	$\begin{bmatrix} 0.792 & 2.236 \\ 0.5 & 0.7 \end{bmatrix}$	1.80
5	Low	High	High	$\begin{bmatrix} 0.622 & 1.534 \\ 0.75 & 0.8 \end{bmatrix}$	1.79
6	Low	High	Low	$\begin{bmatrix} 0.622 & 1.435 \\ 0.75 & 0.7 \end{bmatrix}$	1.70
7	Low	Low	High	$\begin{bmatrix} 0.83 & 1.252 \\ 0.5 & 0.8 \end{bmatrix}$	1.61
8	Low	Low	Low	$\begin{bmatrix} 0.415 & 1.171 \\ 0.5 & 0.7 \end{bmatrix}$	1.34

For juvenile fecundity, low = 0.83 female offspring/female per year, high = 1.58 female offspring/female per year; for adult fecundity, low = 1.98 female offspring/female per year, high = 3.78 female offspring/female per year. For juvenile survival, low = 0.5, high = 0.75; for adult survival, low = 0.7, high = 0.8.

For each matrix, upper left value represents juvenile reproductive rate, upper right value represents adult reproductive rate, lower left value represents juvenile survival, and lower right value represents adult survival.

Table 2—Geometric mean λ for free-roaming cat populations with either reduced fecundity, simulating the effects of a trap-neuter-return program, or reduced survival, simulating the effects of a euthanasia control program. Geometric means were calculated over the 8 baseline matrix models in Table 1 with fecundity or survival reduced by the percentage indicated.

Fecundity	Juvenile survival (%)	Adult survival (%)	λ
Baseline	Baseline	Baseline	1.84
10	NC	NC	1.73
25	NC	NC	1.59
50	NC	NC	1.35
75	NC	NC	1.08
NC	10	10	1.63
NC	10	25	1.53
NC	25	10	1.46
NC	25	25	1.36
NC	50	50	0.91
NC	50	75	0.73
NC	75	50	0.62
NC	75	75	0.47

NC = No change in the vital rate from the baseline values.

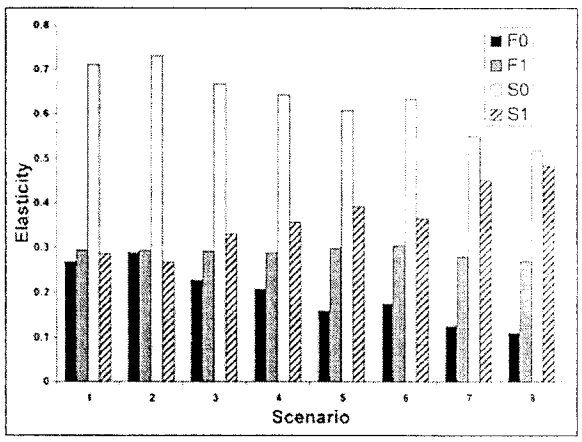

Figure 1—Elasticity of the intrinsic rate of population increase in response to changes in survival and fecundity rates of free-roaming cats under 8 scenarios corresponding to the matrices in Table 1. Survival and fecundity rates that yield larger elasticity values are expected to have a greater influence on the intrinsic rate of population increase. F_0 = Juvenile fecundity. F_1 = Adult fecundity. S_0 = Juvenile survival. S_1 = Adult survival.

Table 3—Elasticity of λ in free-roaming cat populations for mean vital rates and random matrices derived from a range of values for each vital rate.

Vital rate	Elasticity of λ for mean vital rates	Elasticity of random matrices		
		Minimum	Maximum	Mean (SD)
Juvenile fecundity	0.34	0.12	0.33	0.20 (0.045)
Adult fecundity	0.28	0.26	0.33	0.30 (0.016)
Juvenile survival	0.76	0.55	0.72	0.65 (0.034)
Adult survival	0.24	0.28	0.45	0.36 (0.035)

reduction in fecundity of the cat population led to a growth rate of 1.59, whereas a 25% reduction in survival reduced growth rate to 1.36 (Table 2). Fifty percent and 75% reductions in survival similarly led to greater reductions in population growth than did the 50% and 75% reductions in fecundity. Elasticity values ranged from as high as 0.73 for juvenile survival in 1 scenario to as low as 0.11 for juvenile fecundity in another scenario. Elasticity for the survival rates ranged from 0.27 to 0.73, whereas elasticity for the fecundities remained < 0.30. This result was mirrored by the stochastic analyses of λ (Table 3). Elasticity values for the mean vital rates ranged from 0.24 to 0.76, and the mean elasticity values for the random matrices ranged from 0.20 to 0.65. The highest elasticity values were for juvenile survival, suggesting that population growth is most sensitive to this vital rate, followed by adult survival. Control strategies that target survival of free-roaming cats should be more effective at reducing cat populations than those that target fecundity.

Discussion

Matrix population models have been used successfully in many population management strategies.[18,20,22,23,29,36] Such models have been used to assess the viability of populations of endangered plants[19,26] and animals,[21,22] to assess the impacts of wildfires[24] and pollutants on natural populations,[25,27,28] and to study the pathogenicity of an external parasite.[37] Matrix models are often preferred in management applications because of the degree of development of the underlying mathematics, the level of realism of the models, and the ease of parameter estimation.[38]

The geometric mean growth rate rather than the arithmetic mean is the appropriate measure of the most likely growth rate of a stochastic population growth process. The geometric mean best represents the expected rate of growth of a population in which one of the possible population matrices is randomly chosen at each time step. In other words, if one of the different possible population projection matrices considered was randomly selected and a population was to grow according to that matrix for that time step, and another matrix was randomly selected for the following time step, then over time, the population's long-term growth rate would be the geometric mean, not the arithmetic mean, of the set of possible growth rates.[17,30] Thus, the use of the geometric mean of λ as the summary measure directly and explicitly recognizes the uncertainty in the parameter estimates.

Demographic elasticity analysis is a way of calculating the effect of small changes in the vital rates of a population on the population's rate of growth. Analytically, this can be computed as the partial derivative of λ with respect to each individual vital rate, holding the others constant. These partial derivatives are referred to as sensitivity values; when these values are multiplied by the ratio of the vital rate in question to λ (to scale for differences in the vital rates themselves), they are referred to as elasticity values.[17] The elasticity of λ can be calculated with respect to particular vital rates or with respect to the matrix elements themselves. In this analysis, the elasticity of λ was calculated with respect to each vital rate (ie, stage-specific fecundity and survival) because the matrix element for fertility was a composite of several vital rates.

Examination of elasticity values is valuable in assessing management strategies for free-ranging populations. Such strategies nearly always have age-specific effects, representing a perturbation in a particular vital rate, and are aimed at either increasing or reducing the target population's growth rate. Management strategies intended to alter vital rates with particularly high elasticity values are more likely to achieve their goal than strategies that target vital rates with low elasticity.[30]

Management programs for free-roaming cat populations typically focus on either survival (euthanasia programs) or fecundity (TNR programs). Because these 2 approaches target different vital rates, they may have fundamentally different outcomes with respect to their influence on cat population growth rate. Under scenarios lacking control, feral cat populations were predicted to grow rapidly because all values of λ are substantially > 1. The model results further suggested that a reduction in survival might have a more profound effect on cat population growth rate than a reduction in fecundity. A 50% reduction in annual survival rate was predicted to result in a cat population that declined by approximately 10% per annum, whereas a large reduction in annual fecundity (75%) in both the juvenile and adult stages was predicted to result in an increasing population. The interpretation that survival had a greater predicted influence on population growth rate also was supported by results of the elasticity analyses; cat population growth rate was more sensitive to survival regardless of the control scenario.

Juvenile survival has been identified as a key population management target in matrix-modeling studies of other species.[18,21] Given the uncertainty of the vital rate estimates, the sensitivity of urban cat populations to changes in adult and juvenile survival cannot be confidently distinguished. Nevertheless, changes in survival are always predicted to have a greater influence on population growth than changes in fecundity.

Matrix population models have also been applied to owned populations of pet dogs and cats.[39,40] An age-structured matrix of pet cats yielded a λ of 1.21 for cats through the first 5 years of life.[39] This value is lower than any growth rate calculated for the unmanaged population structures used here; however, those authors were modeling pet populations in which responsible owners had a substantial number of cats neutered or prevented breeding by fertile cats. A spay

rate of 88% would be needed to stabilize population growth if all fertile cats were free to breed.[39] In a separate study,[41] a growth rate of 1.02 was calculated for a citywide pet cat population with a spay rate of 85.7%. This result is similar to the most intensive fecundity reduction used in this study, in which a 75% reduction in fecundity yielded a geometric mean λ of 1.08. These results suggest that management actions that reduce fecundity in excess of 75% of the fertile population would need to be maintained, on an ongoing basis, to cause a population decrease in a TNR program. Thus, TNR programs are not likely to convert increasing cat populations into declining populations or even stable populations until the neutering rate is quite high.

Nevertheless, population decreases under TNR programs have been recorded. In 1 study,[4] a 26% population reduction over an 18-month period with an approximately 70% neuter rate was reported. This reduction also included a population reduction of 25% through a concurrent adoption program. Another study[10] revealed profound population reduction in a managed cat population with essentially a 100% neuter rate and adoptions occurring at a high rate (approx 47% of the population). Adoption programs are similar in effect to euthanasia because these cats are permanently removed from the free-roaming population.

Feral or free-roaming cat populations are subject to additional population processes that were not considered here. The survival rates used may account for extrinsic factors that would be expected to cause death (eg, intraspecific aggression or disease), but the estimates of fecundity used did not incorporate a measure of density dependence, which might be expected to lower reproductive rates at high population densities. Density dependence was omitted for 2 reasons. First, there are no reliable estimates of the reduction in fecundity that would be expected at high population densities; second, small populations would not be influenced by density dependence to any great degree. Emigration also is apt to be a substantial population factor that was not considered. Emigration between cat colonies has been reported,[1,4,10] and a substantial number of owned cats are reported to be adopted strays.[5,33,41] Evaluating the efficacy of euthanasia versus TNR programs would benefit from additional field studies that estimate other population processes and from well-designed monitoring programs run in parallel with control programs.

[a]MATLAB, The MathWorks Inc, Natrick, Mass.

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Selected abstract for *JAVMA* readers from the *American Journal of Veterinary Research*

Effects of dietary fat and energy on body weight and composition after gonadectomy in cats

Patrick G. Nguyen et al

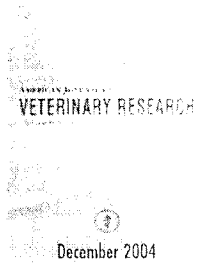
Objective—To evaluate the effect of dietary fat and energy density on body weight gain, body composition, and total energy expenditure (TEE) in neutered and sexually intact cats.

Animals—12 male and 12 female cats

Procedure—Male cats were castrated (castrated male [CM]) or underwent no surgical procedure (sexually intact male [IM]). Female cats underwent ovariectomy (spayed female [SF]) or laparotomy and ligation of both uterine tubes without ovary removal (sexually intact female [IF]). Cats were fed either the low-fat (LF) or high-fat (HF) diet for 26 weeks, with the final allocation consisting of 8 groups: IF-LF, IF-HF, SF-LF, SF-HF, IM-LF, IM-HF, CM-LF, and CM-HF. Mean food intake for each group was recorded daily, and body weight was monitored weekly throughout the study. Body composition and TEE were measured before surgery in week 0 and at the end of the study (week 26) by isotope dilution (double-labelled water).

Results—Neutered cats gained significantly more body fat and body weight (53.80 ± 5.79%) than sexually intact cats (27.11 ± 5.79%) during the study. Body weight gain of neutered cats fed the HF diet was greater than those fed the LF diet. Following correction for body composition, TEE was similar in all groups and no pattern towards increased food intake was evident.

Conclusions and Clinical Relevance—Weight gain in neutered cats was decreased by feeding an LF, low energy-dense diet. To prevent weight gain in cats after neutering, a suitable LF diet should be fed in carefully controlled meals rather than ad libitum. (*Am J Vet Res* 2004;65:1708–1713)



See the midmonth issues of *JAVMA* for the expanded table of contents for the *AJVR* or log onto www.avma.org for access to all the abstracts.

ATTACHMENT #7

TEQECC Meeting of
February 1, 2007

SUPPLEMENTAL #1 TO ITEM 8A

Chairperson McCabe and Members
Of the Environmental Quality Commission
City Hall
Torrance, California

Members of the Commission:

SUBJECT: SUPPLEMENTAL #1 TO ENVIRONMENTAL QUALITY AND ENERGY CONSERVATION COMMISSION ITEM 8A Discussion of Feral Cat Issues.

The following correspondence was submitted after the item was completed.

Respectfully submitted,

Linda Cessna
Deputy Community Development Director

Attachments:
A. Correspondence

Cessna, Linda

From: Barnett, Gene
Sent: Wednesday, January 31, 2007 8:47 AM
To: Cessna, Linda
Subject: FW: A Rescuer's Input on The Feeding of Feral Cats

This came in yesterday. Gene

From: Susan Trear [mailto:STrear@jdtplaw.com]
Sent: Tuesday, January 30, 2007 6:09 PM
To: PMNowatka@TORRNET.COM
Cc: Stacy Polk; Linda Wilson Wyman; JACQUELINE deHAVILAND; Elaine J Regan; Karen Wood; fcotto@torrnet.com; TBrewer@torrnet.com; GDrevno@torrnet.com; pmcintyre@torrnet.com; BSutherland@torrnet.com; hwitkowsky@torrnet.com; Meegen.Murray@sen.ca.gov; gbarnett@torrnet.com; governor@governor.ca.gov; mayordaniel@gmail.com
Subject: A Rescuer's Input on The Feeding of Feral Cats

Dear Mr. Nowatka: I understand that this will be taken up on Thursday as a "will we or won't we" type of decision; please correct me if I am wrong. I will be away tomorrow and out of the City on Thursday, so this is my only opportunity to offer the knowledge I have gained over the years. I myself am a feral cat feeder/trapper in Orange County, and would like to offer input on this very cruel and terrible idea which, of course, punishes the cats instead of the people who allow them to breed endlessly and die terribly. In addition, any decision against the feeding of the cats is self-defeating, "spitting in the wind," so to speak. There are feral cats everywhere in the world. So Wilson Park in Torrance, with all due respect, is just a drop in the bucket. Do the authorities really think that these poor animals will starve themselves into oblivion just because a law is passed prohibiting feeding? It won't prohibit their frantic scrounging in trash, other neighborhoods, fast food restaurants and other venues. They will disperse, find some kind of food, some but not all will starve (a horrible and cruel death), they will become diseased, will not get the rabies shots we provide nor the flea treatments nor the spay/neuter that keeps their numbers from becoming exponentially unmanageable. It is always, always, always a mistake to think that one can legislate feral cats' existence, or that outright killing them will solve the problem. It will never happen. They are here and will always be here as long as humans get a cute little kitten, do not spay or neuter it, and turn it out in 5-6 months to fend for itself, often just moving away and leaving it. Then the exponential breeding begins. Torrance's problem, like thousands of other cities around the world, lies with humans, not with cats. It is only the rescuers, trappers and feeders who keep the cats free of disease, relatively healthy and non-proliferating. In addition, normal attrition will reduce the numbers of ferals cats in our care anyway. Where there is a void such as the removal of a feral colony en masse, other ferals will fill the void quickly but they will not be free of disease, spayed or neutered. Then you will just have to sit back and watch the numbers grow with every kitten season. You will be unable to call on the trappers and feeders; their services will be unlawful should this pass against the feeding. This idea was born of ignorance and fostered by someone who cannot possibly appreciate the suffering these animals endure in their short lifetimes. I am trying so hard to address this politely, but the sheer ignorance and cruelty of this idea is astounding. Torrance is shooting itself in the foot on this one, Mr. Nowatka and, with all due respect, it will actually make Torrance's "problem" with the feral cats worse than you can imagine. If it weren't so terribly sad and cruel, this venture would be laughable. Of course, there will always be the feeders and trappers who will risk everything to save these poor creatures or give them a mouthful of food on a hideously cold night when they are starving, in spite of these types of pointless legal acrobatics. I am one of them. Then you would cite or even lock up the only people who could help you; and the people who cause the problem will continue to get off scot free of responsibility for this huge problem. Thank you for your time and I would appreciate it if you would share this with those whose time will be cleanly misspent on this entire matter when the only program that works was already in place: TRAP, NEUTER, RETURN. There is no other humane or entirely effective way to deal with this problem unless you being to exact fines on the careless and ignorant owners who create these vast numbers of homeless animals. Animal Control knows this and should be working with us, not against. These aren't cockroaches, Mr. Nowatka, but sentient beings who feel hunger, pain, cold and fear just as we do, only they feel it 24/7. Let's not make it worse with an uninformed decision on this matter. Talk

with the rescuers and trappers who attend. They can help a lot and the City of Torrance would do well to work with them.

Susan A. Trear
Assistant to
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Cessna, Linda

From: David Young [davidryoung@linkline.com]
Sent: Saturday, January 27, 2007 2:11 AM
To: LCESSNA@torrnet.com
Subject: Project Succeeds with Humane Feral Cat Management Program

Linda,

Please see this link.

http://www.fostercity.org/news/press_releases/Project-Bay-Cat-Succeeds-with-Humane-Feral-Cat-Management-Program.cfm

David Young
310-370-4871

City of Foster City - Project Bay Cat Succeeds with Humane Feral Cat Management Program

NEWS

'Andra Lorenz, Management Analyst
650-286-3215

FOR IMMEDIATE RELEASE

Project Bay Cat Succeeds with Humane Feral Cat Management Program

Foster City, CA; March 27, 2006

The City of Foster City, Homeless Cat Network and Sequoia Audubon Society today announced the successful completion of Phase II of Project Bay Cat, a unique coordinated effort to humanely solve feral cat challenges along Foster City's Bay Trail. Project Bay Cat was officially launched last year to curb the homeless cat population growth through aggressive spay/neuter and adoption programs, as well as to protect bird habitat and improve debris management along the path.

To reach the program's goals, the collaborators of Project Bay Cat have worked together to achieve success on several fronts, including stabilizing the feral cat population, reducing the cats' environmental impact, and educating the community while enlisting its help.

Stabilizing the feral cat population
With over 170 cats living along the popular trail in 2004, one of the program's primary goals is to stop the homeless cat population from growing. To this end, volunteers have diligently trapped the cats to have them spayed/neutered, tested for disease, and vaccinated. Spearheaded by Homeless Cat Network volunteers and thanks to the veterinarians from San Mateo Animal Hospital and Crystal Springs Pet Hospital, 92% of the cats that live along the levee pedway have now been altered. This has successfully stabilized the population's growth. Homeless Cat Network also created an aggressive fostering and adoption program and found homes for over 60 kittens and friendly adult cats.

Due to its dedicated spay/neuter and adoption efforts, Project Bay Cat has already reduced the number of cats living along the levee pedway by 30%, thereby exceeding the program's initial goals.

"The homeless cat population started as a result of illegal abandonment by irresponsible people," says Cimeron Morrissey, Project Bay Cat manager for Homeless Cat Network. "We're correcting the problem in a wonderfully positive and humane way while also protecting the environment and improving the pedway for trail users. It's a win-win-win program."

Reducing the environmental impact
To protect birds and their habitat and reduce debris along the levee pedway, 10 cat feeding stations were built by Homeless Cat Network and installed along the trail. Appropriate locations for the stations were jointly identified by the three groups, with special consideration given by Sequoia Audubon Society to insure that the stations were placed away from bird habitats. The program's effectiveness is a result of keeping the cats well-fed and concentrated away from avian nesting sites.

"There are fewer cats on the Foster City Bay Trail now, and those that remain appear healthier," says Robin Winslow Smith, Conservation Committee Chairperson of the Sequoia Audubon Society. "Thanks to the feeding stations and the spay/neuter effort, the cats seemed to have settled into the program and don't need to hunt for dinner since they have it in their feeding stations." As further evidence of the program's effectiveness, Sequoia Audubon Society recently found that the endangered California Clapper Rail, which lives in a marsh on the border between Foster City and San Mateo, is thriving and is not impacted by the cats. In fact, the Rails are quite easily seen and heard there at high tide.

Educating the community and increasing involvement
To educate the public about the unique program and encourage community involvement, the City of Foster City erected four Project Bay Cat signs along the levee pedway. Because the homeless cat problem is a result of animal abandonment, which is an illegal and inhumane act, the signs discourage abandonment and inform the public to call police if they see suspicious or malicious activity. The signs also ask the public not to feed the cats unless they are registered through Homeless Cat Network as official feeders.

"The results speak for themselves about the success of this wonderfully collaborative project," says Kevin Miller, Foster City's Parks and Recreation Director. "Most impressively, we've achieved success without expense to taxpayers since the program has been implemented by volunteers, and by veterinarians who have donated their services to this humane endeavor. Project Bay Cat is a wonderful improvement effort for the community and by the community," says Miller.

Initiating Phase III
The successful completion of Phase II marks the transition from active program development to ongoing maintenance. In Phase III, volunteers will continue to provide food and water to the homeless cats while also working to trap the remaining unaltered felines for spay/neuter surgery. Homeless Cat Network is seeking additional volunteers to help feed the cats, foster and socialize kittens, and to humanely trap cats for spay/neuter.

Project Bay Cat Tool Kit
Project Bay Cat has become a model program for others around the world hoping to humanely solve feral and homeless cat challenges in their own communities. The collaborators have created a step-by-step Tool Kit, which is available for free by emailing info@homelesscatnetwork.com.

About Project Bay Cat Partners

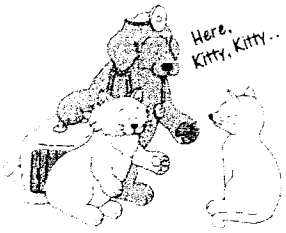
City of Foster City
Located on the peninsula, Foster City has a population of approximately 29,500. The City is redefining what it means to be a planned community, working beyond architectural and city planning issues to find ways to resolve issues collaboratively. This unique municipality embodies the positive ideals originally set forth in its development.

Homeless Cat Network
Homeless Cat Network (HCN) is an all-volunteer, 501(c)(3) nonprofit, feline rescue organization working to humanely reduce the homeless cat population on the San Francisco Peninsula through spay/neuter, adoption, public education and responsible colony management. The organization provides advice, assistance and mentoring to individuals, public agencies and businesses. HCN offers a variety of rewarding volunteer opportunities including kitten fostering, cat socializing, feral cat management and homeless cat rescuing.

Sequoia Audubon Society

The mission of Sequoia Audubon Society is to participate in environmental education and conservation, and in the restoration, preservation, protection and enjoyment of our native natural resources with emphasis on birds and their habitats.

City of Foster City, 610 Foster City Boulevard, Foster City, CA 94404 (650) 286-3200



Best Friends Catnippers

January 29, 2007

Environmental Quality Energy Conservation Commission
City of Torrance
3031 Torrance Blvd.
West Wing Commission Room
Torrance, CA 90503

Dear Commissioners:

I am respectfully submitting this letter in connection with your evaluation of a proposed ordinance in the City of Torrance to prohibit the feeding of wild, homeless, stray and feral cats.

In 1999, my wife and I founded Best Friends Catnipppers, an outreach program of the nationally-acclaimed Best Friends Animal Society, for the purpose of conducting high-volume spay-neuter clinics as a way to stem the tide of ever-increasing numbers of homeless cats. We did so after considerable investigation about the problem of feline homelessness, and concluded that the community-based method of Trap-Neuter-Return made the most sense.

Since then, we have conducted over 70 clinics to spay and neuter feral cats, averaging in recent years well over 100 per clinic. Otherwise, we have raised funds to pay private vets to spay and neuter feral cats, and helped hundreds of caregivers implement TNR. All in, these activities have resulted in the sterilization of some 11,000 feral cats, preventing literally millions more from coming into the population.

Our program has done considerable work on behalf of commercial properties, college campus sites, movie studios, industrial complexes and other business locations. In addition, we specialize in helping average citizens who come upon a feral colony do their part to get the cats fixed. This "yard by yard, block by block" approach has resulted in the population stabilization of countless numbers of local neighborhoods.

Our direct field experience over the past 8 years demonstrates that once cats are sterilized and returned, there are virtually no adverse consequences. We have trained and helped literally hundreds of individual caregivers and know what they are dealing with in their neighborhoods. Overwhelmingly the result is nothing but population control, and calm, community acceptance of sterilized cats living in relatively secluded locales. Certainly the implementation of TNR has not brought about consequences that are worse than the alternatives. In this regard, an ordinance prohibiting the feeding ferals will most likely result in:

P.O. Box 26, Woodland Hills, California 91365-0026
(818) 377-9700

- Abandonment of TNR efforts by local citizens, thus resulting in the proliferation, not a reduction in the number, of feral cats, through normal reproductive activity. Hence, more cats, living lower-quality lives, intruding upon society in many ways, simply to survive.

- Increased pressure on wild bird populations, whose supporters are very vocal.

- More, not less, complaints to local animal shelters about roaming, fighting cats.

- The establishment of "underground" activities in furtherance of TNR, with citizens facing prosecution simply for doing what in their hearts they know is right.

As a lawyer and business executive, I have great respect for the challenges facing city governments, and appreciate that it is not always easy to see the right course. In this case, I submit that the proposed ordinance would be a huge mistake for the City of Torrance, and is not warranted on environmental grounds for the reasons indicated. Furthermore, properly implemented TNR is a far more humane approach to solving the problem.

Sincerely,

MARK S. DODGE, Esq.
Program Co-Director
Direct Telephone Number (Cell): (818) 298-2066

City of Torrance, Police Department

Confidential FAX Report Cover

CONFIDENTIALITY NOTICE:

This FAX may contain confidential information. If you are not the intended recipient, be advised that any disclosure or copying of this information is prohibited. If you believe you have received this FAX in error, please call (310) 618-5641 immediately for instructions or to arrange for the return of this material.

Thank you for your cooperation.

Date: 2/1/07 **Number of pages (including cover sheet):** 7

TO: LINDA CESSNA

Phone: ( )
Fax: ( )

FROM: PATRICK WREN

Phone: (310) 618-3850
Fax: (310) 618-

Copy:

REMARKS: ☐ **Urgent** ☒ **For your review** ☐ **Reply ASAP** ☐ **Please comment**

This is information that we have received here in Animal Control in reference to the possible ban on feeding of animals.

TPD 160 (Rev. 11/99)

ADELE MIRSHAK
P. O. BOX 1354
RICHMOND, TX 77406-1354
281-342-0829

17 December 2006

Mr. Patrick Wren
Torrance Animal Control
2200 Jefferson Street
Torrance, CA 90503

Dear Mr. Wren:

I am so saddened to hear that the City of Torrance is considering a ban on the feeding of any feral/stray cat in the City of Torrance. I do not understand why, or what the city hopes to accomplish. Have the consequences of such an action been well thought out? If this ban is passed, what do you expect these animals to do?

Please remember that these stray/feral cats did not voluntarily choose to be homeless and hungry, just as I am sure most of you would not make such a choice. The fact that they find themselves in such a predicament is not their fault. Rather, it is the fault of irresponsible owners who will not spay/neuter, who will not care properly for these animals, and who irresponsibly dump them elsewhere when they become pregnant or need care the owner is not willing to give. Then what are these animals to do? How will they live?

I understand that there is an excellent TNR (trap, neuter, return) program in effect in Torrance, which has been privately funded and maintained. I can tell you from personal experience that this is a program that produces excellent results. When I first moved to my neighborhood many years ago, there were more than two dozen stray/feral cats in the neighborhood, many of them courtesy of people who dumped them here with the idea that "someone will take them in and give them a home." Several neighbors and I got together and started our own TNR program. We trapped the cats, had them spayed or neutered (with our own money) and gave them the required shots. Those that were not completely feral were taken in by one of us and tamed, after which we found homes for them. Those that were too feral to be tamed were released back into the neighborhood where they were fed and cared for. Because of the spaying and neutering, each year there were fewer kittens born, and in 2006 only one kitten was born, courtesy of a new cat that was dropped. We are proud of our record, and the fact that we did not have to kill any animals to achieve this stabilization.

Unfortunately, one of three inhumane scenarios will result if this proposed ordinance is passed:

1. The cats will starve to death.

2. The hungry, bewildered, frightened cats will start migrating from their known and controlled environment to other neighboring areas, roaming the streets looking for food, with the result that many will be hit by cars or encounter other perils in their quest for survival. I understand that many of the cats have already been trapped for TNR and will probably not re-enter a trap. They will then start to search for a source of food.

3. City employees or pest exterminators will trap them for the purpose of euthanasia, which will be extremely costly to the taxpayer.

Also, if the city decides to start trapping and euthanizing these stray/feral cats, many owned pets will also be caught, resulting in their deaths if their owners do not find them at the county shelter in time.

The City of Torrance can accomplish their goal of ". . .getting under control the abundance of feral cats that populate that park and the surrounding area. . ." **, and with less cost to the taxpayer than trapping for the purpose of euthanasia.** Please talk to the people in Torrance who have initiated and maintained their own successful TNR program. Also, there is an organization that would be more than happy to advise the City of Torrance on a TNR program. Please contact Alley Cat Allies, 7920 Norfolk Avenue, Suite 600, Bethesda, M12/17/2006 20814-2525; Phone: 240-482-1980; Fax: 240-482-1990; Email: [illegible].

I beg you; please consider these other options rather than instituting a feeding ban or trapping for the purpose of euthanasia. These bewildered, defenseless animals are depending on the humans in their world for compassion and care. They deserve nothing less. They certainly do not deserve to die just because some people have decided that is the way to take care of the problem. We have already become enough of a "throw-away" society. If you passed a child begging for food in the street, would you turn away? I think not. Please do not turn away from these animals and condemn them to the horrors of death by starvation and condemn the people who have been caring for them to the horrors of watching them starve to death because a law says they cannot be fed.

Thank you for your time.

Sincerely,

Adele H. Mirshak
P. O. Box 1354
Richmond, TX 77406-1354

[illegible]

To: [illegible]
[illegible]
[illegible]
[illegible]
[illegible]
letters@[illegible].com
Cc: [illegible]
From: [illegible]
Subject: Proposed Ban on Feral Cat Feeding in Torrance, California
Date: Monday, December 17, 2007

I support my friend's comments to all of you. Adele speaks for more of us than you can imagine!!! Please, with an open heart, read her comments again!

Kind Regards,

Linda Mawby
3737 Cambridge St.
Kansas City, KS 66103
913-236-9946

To:

Mr. Frank Scotto, Mayor of Torrance, [illegible]

City of Torrance Council Members:

Mr. Tom Brewer, [illegible]

Mr. Gene Drevno, [illegible]

Mr. or Ms. Pat McIntyre, [illegible]

Mr. Paul M. Nowatka, [illegible]

Mr. Bill Sutherland, [illegible]

Ms. Hope Witkowski, [illegible]
Community Services Director

Mr. Gene Barnett,

Mr. Patrick Wren,
Torrance Animal Control
2200 Jefferson Street
Torrance, CA 90503

Ms. Meegen Murray,
Legislative Assistant to
Senator Alan Lowenthal, District 27,

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