Shelter Crowd Control:
Keeping Community Cats Out of Shelters
Webcast Transcript

January 26, 2012

Laurie Peek: Good evening, everyone and thank you for being here at Maddie's Institute's webcast, Shelter Crowd Control: Keeping Community Cats Out of Shelters. I'm Dr. Laurie Peek, the Director of Veterinary Programs for Maddie's Fund®.

The word revolutionary gets used a lot—so much that we usually don't take it seriously. But the information Dr. Julie Levy will share with you tonight really does constitute a revolution in how we in the shelter and shelter medicine communities think about, talk about and care for community cats.

From the latest medical information on how to safely trap, test, spay/neuter and treat them to how to work with your community members and local governments to establish best practices in your municipality, Dr. Levy will share with you tools that will enable you to reduce the number of cats coming into your shelter to a trickle and to save tens and thousands of feline lives every day – every year.

Most revolutions have heroes and Dr. Levy is definitely one of mine. She could have gone into any area of veterinary medicine and achieve massive success. We are so blessed that she chose to dedicate her talent, expertise, training and brilliance to the cause of shelter medicine and to help us do right by feral and community cats.

In addition to her title of shelter medicine hero, Dr. Levy is the director of Maddie's® Shelter Medicine program at the University of Florida and founder of Operation Catnip. She is a recognized leader in the field of shelter medicine and a staunch advocate for community cats and we're very honored to have her here with us tonight.

Before we get started, however, we have a few pieces of housekeeping to cover. We'll be drawing 10 names of those of you who attend tonight in a drawing to win one rigid live cat trap and one neighborhood cat drop trap, both generously donated by Tomahawk Live Traps, as well as eight copies of *Maddie's® Infection Control Manual*.

Next, please take a look at the lower left-hand corner of your screen where you'll see a Q&A window. That's where you'll be asking questions

during the presentation. Dr. Levy will answer as many of the questions as she can at the end of the presentation. So please don't hold your questions until then. Ask them all during the event. Questions asked in the last few minutes will probably not get processed in time for a response so get yours in as soon as you can. If you need help with your connection during the presentation, you can click the help icon at the bottom or your screen or you can go to event.on24.com/view/help. You will also see other little images at the bottom along with the help button. These are widgets that will take you to the resources our presenter wanted to share with you tonight as well as some shared by Maddie's Institute.

Once you click on the resource widget—and you might want to give it a try right now—if you can't see all the resources, click on the green maximize button on the right corner of the resource box and that should expand it for you. But if you still can't see them, no worries, we'll be emailing them to you.

Before I turn things over to Dr. Levy, I wanted to say a few words about Maddie's Fund. We are the nation's leading funder of shelter medicine education and it's our goal to help save the lives of all our nation's healthy and treatable homeless dogs and cats.

Dave and Cheryl Duffield founded Maddie's Fund in honor of the unconditional love brought into their lives by their dog, Maddie. Their hope is we will use their funding to help make this country a safe and loving place for all dogs and cats. Please use what you learn here tonight to make the dream Maddie inspired a reality for all her kind, including feral, unsocial and community cats.

Dr. Levy, thank you for being here with us this evening.

Julie Levy: Thank you, Laurie, for all those very kind words and I would like to share a shout out to Tomahawk Live Traps for providing the traps in the drawing. I have had the opportunity to see the new drop trap and it is quite exciting, something a lot of us having been waiting to come out and we definitely use their traps in our feral cats programs. They've been a good friend of feral cats.

This first slide just talks a little bit about what I'm going to be trying to cover tonight. As usual, it's hard for me to contain myself when I'm talking about community cat programs. There's so much to discuss and it's so exciting how things are changing now. So we're going to cover a lot of ground tonight in a short amount of time.

I'm going to talk about what it takes to get broad based community support for community cats. So the secrets for nonlethal management of

community cats, talking about the pros and cons of confining them, neutering them and adopting them. We'll touch on how we address high quality, high volume spay/neuter here at the University of Florida and our community cat program and how to get the most out of the limited resources that we're all working with without cutting corners of quality control, infectious diseases, vaccination and medical decisions.

But really what I'm going to spend most of the time tonight talking about is evidence that proves TNR works and how to get your local government on your side, including some language that can be provided in a sample municipal code. And all of the examples that we'll be talking about tonight are real world stories from different communities that are addressing novel ways of community cat management.

Laurie Peek: Here we have our first of four poll questions. What is your primary role in animal welfare? Employed at an animal shelter, employed at a rescue group, employed in a spay/neuter program, veterinarian, veterinary staff or other. So what is your primary role in animal welfare? Now, if you're using a mobile device, you may not be able to access the poll questions so we're sorry about that.

I'm going to go ahead and push these results. It looks like 13% employed at an animal shelter, 10% employed at a rescue group, 8% employed in a spay/neuter program, 18% veterinarian, 4% veterinary staff and 46% other.

Julie Levy: Well, it looks like we have a real mix of different people coming with different experiences and probably different expectations for this presentation so I hope to share with you something that everybody will come away with new tools and new information they can use to enhance their community.

Let's talk about cats. Cats are believed to be the only species to domesticate themselves and I've always thought that this is logical. Cats do seem to just show up at the door and insert themselves in our lives and approximately 10,000 years ago, they did that in a formal way and became a domesticated species. They've been living very successfully in our homes and also at the periphery of our human societies all over the world for over 10,000 years.

But these cats are also very controversial. We know that there are environmental impacts that cats can have and that concerns both cat lovers and those whose primary concern is protecting the environment. Similarly, as in all species, particularly those that might be living in a more wild situation, there's public health concerns and cats, we worry about rabies or intestinal parasites or ringworm. We're certainly very

worried about the welfare of the cats themselves and that's what brings a lot of us to this field because we do have concern about whether cats are free-living, can get the shelter and food and support that they need to have a good quality of life.

And then probably more than anything else right now is an emerging controversy that's trying to balance the pros and cons between traditional animal sheltering, no-kill sheltering and management of these cats in the environment that they've made their home.

Let's talk about some language so we're all talking about the same thing. I've turned to calling unowned cats community cats as a group because it allows me to be very inclusive of all of the cats that might be out in the environment either having impacts or suffering or contributing to uncontrolled cat reproduction. So stray cats, I generally consider to be those homeless pet cats that have either been abandoned or lost or never had a home but were very friendly and these socialized cats give us more options. We can put them into adoption programs when such exist or manage them in the community where they're thriving.

By definition, feral cats are those that are untamed and they're afraid of people. These are generally born in the wild or they may be stray pets that have turned wild and we are more limited in our choices for managing these because they are not eager to share our homes with us.

How many cats are we talking about here anyway? I think one of the most shocking things when you really put it down on paper is that we're talking about millions and millions of cats. If we just look at the pet cats in this country, there are almost 90 million of them as of the last survey. The good news is the vast majority of these cats have been neutered, although unfortunately, not always in time to prevent that first litter so we need to work on getting neutering age of cats down to five months or earlier so we don't have those accidental litters. But by and large, we've done a very good job educating the public.

How many of these free roaming unowned cats are there? Depending on the survey that you're looking at, it's estimated to be somewhere between 10 million and 90 million cats in the U.S. These are generally numbers that come from surveys of cat feeding in which residents are asked whether they feed any cats that they don't consider to be owned by them and then extrapolated on a larger basis. So this, by any count of either end of the range, is a massive number of cats. And it's estimated that only about 2% of these are sterilized so it's very easy to see which cats are contributing to our cat population problem. And whenever you're designing public policy or new programs, it's important to know the scale of the problem that we're attempting to address. And I get calls frequently

from people who want to know how many cats they should estimate are in the community that they're trying to serve. And so estimating the number of free roaming cats in general can take the human population which you can get from the U.S. Census web site, divide it by six and that will give you a ballpark idea of the number of unowned free roaming cats in that area.

For example, in my county which is Alachua County, there are 250,000 residents. If we divide that by six, we believe that there are almost 42,000 free roaming cats. There's another 46,000 or 48,000 pet cats. So this is a massive number and we're a somewhat small community and still talking about tens of thousands of cats. So suddenly this helps us understand that our solution to this problem needs to be very large scale because the issue itself is very large.

Another way to look at this is this table and we will make a copy of the slide presentation available for downloading after the talk. So don't worry so much about writing down all these numbers. You'll get a copy. But what I'd like you to focus on is putting some numbers into this model and looking at where the kittens are coming from.

If we start with approximately an equal number of pet cats and community cats, assume that about half of them are female but most of the pet cats are neutered but the community cats are not. There's lots of data to show that an average number of litters per year is about 1.4 per female and that live births might be around three per litter. The kittens born per year clearly are predominant in the community cat side and even though their survival is much lower than for pet kittens, their impact on the total cat population is much greater. So the kittens that survive to at least weaning age are four times higher in the community cat population than the pet cat population. So this really helps us understand where the low hanging fruit is if we want to control cat reproduction in our communities.

What does the public in general think about these cats? People on this call probably are invested in some opinions and attitudes already whether it's supportive of the cats or not. But there's been some nice national surveys where people are just randomly contacted and given a choice. And so in a recent survey, people who answered the phone were asked, "What would you do about unowned cats in the street if you only had two choices. One would be to leave the cats untouched. The other would be to trap them and kill them, which is what very commonly is done in animal shelters, particularly if the cats are feral." And what we see is when it's stated that way, reflecting the likely outcome for cats that are trapped and brought to shelters, the vast majority of common everyday people who don't have a stake, per se, in this debate would opt for the cats to be left alone.

They followed up with a question that said, "But what if you knew these cats would only live for two years?" So this gets to the welfare issue of life out in the field, perhaps being shorter than life in a home. And still the vast majority of respondents said they would prefer that the cats be left alone if they were thriving.

We can also look at a number of surveys which are remarkably similar in their results and these surveys of different areas around the country contacted residents randomly and asked if they were feeding cats that they don't own. So what you see here in the top line in Alachua County, that's a survey we did and we found that 12% of households had 3.6 cats on average that they didn't own. And that's where we got our estimate of 42,000 cats in our community. But what I find striking is in all these different areas of the country, we see everywhere that cat feeding is a common activity and that it's performed by kind of everyday people and most remarkably about half of the people who were feeding cats don't own pet cats of their own.

This does bring up a question about when do you own a cat? If you feed a cat that shows up as a stray for a few years, does it ever become your cat? And is that person ever considering that cat a pet? And there is something about feeding a stray that inhibits people from actually thinking of that as their pet. They will be very protective of that cat, they don't want it harmed, and they might even go buy food for it because they're not feeding cats of their own. But they still answered the question that this is not their cat.

We've just talked about how big this issue is and that makes it clear that if we're going to try and alter the condition of free roaming cats in our communities, we have to develop programs that are massive in scale. We also have to make programs that are safe for the environment and one of my research topics is studying contraceptive vaccines, trying to make it more efficient to sterilize cats so that we don't have to haul them all into the spay/neuter clinic which is a huge bottleneck for us for getting all this surgery done. And in some parts of the world, veterinary care for companion animals isn't available at all. So we've been looking at developing contraceptives. However, these contraceptives do have to be safe. We probably couldn't bait them in the environment because other animals or even people might access them.

Similarly poisons have been used on islands to eradicate cats but we couldn't do those in our populated communities. It's got to be affordable if we're talking about tens of thousands of cats. Our treatment for each cat needs to be really cheap and this helps form those difficult decisions we'll talk about later about how much veterinary care should we devote to each cat when we're trying to manage the entire population. Because we need

to keep that cost per cat low. It needs to be sustainable. It's not that helpful to go in and neuter a colony and then leave and not follow up because new cats will join the colony and there's always some that you can't trap. So the best managed programs are ones that monitor the colonies and continue to capture those cats that weren't captured on the first round.

And finally, whatever choices we make have to be acceptable to the public. We've shown that there is great public affection for cats, that lots of people are feeding them, and that the population in general doesn't want eradication to be the answer for them.

I just put this cartoon in there because we're going to start talking about the solutions that we have at hand and what this cartoon says is Brad arrived early for his blind date with Sylvia. Already things were looking doubtful. And this refers to, you know, one recommendation that the solution would be just capturing all these cats and confining them somewhere. And that presents a whole slate of challenges.

Laurie Peek: We have a poll question. How well is your community handling unowned cats? "Cats? What cats?"; "We are importing cats into our community to meet the needs of local adopters."; "No problem."; "Almost all cats are moved to permanent homes after a brief stay in a shelter or rescue."; "It's a mix."; "Most of the cats are eventually placed but we feel overwhelmed at times, especially during kitten season."; "We are struggling. More than half of the cats that enter shelters on our community are eventually euthanized. Our live release rate is less than 50%."; And the last one is "I'm not sure."

So how well is your community handling unowned cats? We'll give you a second to answer that. Okay: all right, so it looks like not even one percent. It's great though. Somebody is importing cats. That's wonderful. No problem: less than—well, 0.5% it looks like. And 28% said, "It's a mix"; 59% said, "We're struggling"; and 12% said, "I'm not sure."

Julie Levy: Well, one of the reasons I asked this question was to get a sense for how desperate people feel about managing their cats and then I also had an ulterior motive to identify those 0.3% of respondents who actually had space for cats. If you contact me offline, I'll be happy to provide you with some straight from Florida.

Let's move now into the options that we have for controlling them. Historically, in the United States most of the time these community cats are just ignored. In general, there are no community-wide programs that are run by animal control facilities to manage cats. Most of the responses

are more on a nuisance basis where someone complains about cats and animal control might go trap those cats and remove them but it's not part of a bigger overall control program.

Lethal destruction has been effective on islands that are uninhabited in which case these islands have had cats that were not native there and they had a big impact on native species that evolved without having predators and so those cats have been eradicated by using a whole panel of destructive techniques such as poisoning or infecting cats with panleukopenia, hunting and trapping. But you can't use these lethal techniques indiscriminately on the mainland like you can on an island because we have too many non-target species and people that might get into trouble.

And then I'm sorry to show this picture because I generally try to keep things on an upbeat basis but this is a picture of one day's cat call at our local animal shelter in Alachua County, happily several years ago and we're not euthanizing this many cats now. But these cats were euthanized, either those little newborns all the way up to these big fat tomcats and you can see that they're pretty health, glossy fat cats. They were euthanized because that many more cats were coming in the front door of the shelter and this shelter didn't feel like it had enough options to find live outcomes for these cats out the back door and so daily the shelter staff would were faced with culling this many cats. And again, this addressed the nuisance of individual complaints but it wasn't doing anything proactive to control cats in our community.

We luckily have lots of other options that are being exploited in greater ways now and it's so exciting to see some of the big adoption programs, very innovative, really pushing out large numbers of animals, getting rid of some of our old shelter cultures that made it hard for people to adopt from us, trusting the public more. And so adoption is becoming a much greater part of relief from shelters or final dispositions than it was in the old days of sheltering. It's ideal to place cats with families that can look after them for all of their lives. But at least here in Florida, as of today, we don't have enough homes here in my community and many other Florida shelters. And from the survey, we see that a lot of you feel like that too. And then we're really talking about our feral cats that are unsocialized and afraid of people. Even though some of those can be socialized, it's not a large scale solution to all of those feral cats that are healthy but not suitable as adopted pets.

This is a picture of a typical Florida shelter. It's one of many holding rooms in this big shelter that would take in about 15,000 cats a year. All of these cats are kind of waiting out their time in small metal cages, very stressful conditions, very often having high upper respiratory infection

rates that might lead to euthanasia or at least lead to extended shelter stay as they were being treated. And so in Florida where we are improving in our adoption rates but many of our shelters are still overwhelmed as many of you are.

If we look at the statistics of the actual outcome of cats in animal shelters, in many cases truly feral cats are euthanized as soon as possible because they're categorized as unhealthy and untreatable according to grading matrixes like the Asilomar Accords which is based more on adoptability. Even for those in the shelters that don't automatically euthanize feral cats, there's millions of healthy cats that are euthanized in our shelters every year, even if they're highly adoptable. Either because there's not enough adopters coming to that shelter or as a treatable death because of shelter acquired illness which is extremely common in cats, or simply to prevent what is perceived as potential suffering. And we see this with feral cats. A good-hearted effort to protect the welfare of feral cats in many communities is actually to euthanize them, even though they are thriving on the basis that they might suffer in the future, even though they're not suffering now. This kind of prophylactic euthanasia of healthy animals costs taxpayers and animal welfare donors millions of dollars. And increasingly shelters and the public are asking if euthanizing the vast majority of cats entering shelters, especially if they're healthy, is compatible with the values of a human society and what are we teaching our society when that's the only answer that we can offer the public when they bring cats to us.

And then a third option is sanctuaries. And this is a picture of a beautiful sanctuary for cats that I visited in Brazil. It was very well-funded. It filled up within the first nine months. They had capacity for humanely housing 1,200 cats and within less than a year it filled up and they couldn't take in anymore cats again. And this facility cost over $1 million a year to run. So sanctuaries do have a place for community cats but I like to reserve that space for those cats that really can't be managed in another way so I'm thinking of perhaps blind cats that don't have a safe colony or other cats that really can't be released because this humane sanctuary space is so valuable and so limited.

Many of the big sanctuaries like Best Friends Animal Society also operate very big Trap-Neuter-Return programs on the side to provide more care. And then something that concerns me a great deal is possibly a growth in the occurrence of overwhelmed sanctuaries or maybe just greater awareness of overwhelmed sanctuaries but we are getting a lot more complaints from people who have tried to bring cats to sanctuaries and have turned around because of the poor condition of the cats there. And these are leading to a serious number of very large scale hoarding cases.

This is a sanctuary that we recently participated in a seizure at where 700 cats were removed from a sanctuary that had two people that operated it and this is how the cats were housed. And these cats could expect to live like this for months to years in this sanctuary. And I think we could all agree that this is not providing cats with the welfare they need and we would not consider this to be rescue in its truest sense of the word.

This brings us now to Trap-Neuter-Return as another option. And this is what I'm going to be spending the rest of the time talking about. The goals of Trap-Neuter-Return are different for different agencies but for our program, it's nonlethal population reduction. I don't even like to promise the cats will be eliminated because that's very difficult to do but a good program should reduce the population. We should have healthier and safer cats because we vaccinated them and once they're neutered, they gain weight and they stay in better condition. They should have lower adverse impacts on the environment and on nuisance issues, reducing public complaints because neutered cats don't cause nearly the trouble of intact cats as far as spraying and howling and roaming and causing fights.

And someone once mentioned to me a concept that I really like is these cats do have a home. They've made their home in the community and we're talking more and more about pet retention as an alternative to relinquishment in the shelter, and I think we should think of the community as the home that we are promoting retention in when we're talking about our community cats. Let's support them in the home that they have.

National Animal Control Association (NACA) has given us guidance for animal control agencies. Previously they had a position statement that was very negative about maintaining community cats out in the field where they live and several years ago, they completely rewrote their directive. And this is— there's a copy of the full statement that you can access in our resources. But an important comment from the president of NACA was that we've addressed it as more of a community response. And with that, we've taken into consideration that the traditional methods that many communities use has simply ended up with capture and euthanize are not necessarily the ones communities are looking for today. So if you're working with your local animal shelter and feel like you need to get a new viewpoint, this is a really good one to bring because this is the National Association of Animal Control Facilities and so they have a lot of credibility in that field.

Let's talk about what really is TNR. TNR can be a very expensive menu of treatments but in my mind, the core methods that constitute responsible TNR are live trapping, performing the spay and neuter, ear tipping for identification of the neutered cats, rabies vaccination everywhere in the

U.S. except Hawaii, even if you live in a place that does not require vaccination, and of course euthanasia of ill cats if you can't make them better. So we can treat cats but if we can't make them healthy and suitable for release into the environment, we'll euthanize them. But we've talked about this and I'm going to keep mentioning it all throughout my talk today is we need to find ways to increase the impact of our programs and neuter more cats.

Operation Catnip is the program here at the vet school at the University of Florida. It was originally founded in North Carolina at that vet school and then in 1998 was brought to the University of Florida. It's a free clinic for community cats. We provide spay/neuter, FVRCP, FeLV and rabies vaccines, a topical parasite treatment, and each of our monthly clinics can process between 150 and 300 cats in a single day. We have five to ten volunteer veterinarians, 20 to 30 veterinary students and 30-plus other volunteers and our entire program cost is about $30 a cat. That includes all of our expendable medical supplies, our equipment purchases such as traps and surgical instruments, as well as our overhead cost such as our bank and phone.

We do believe that any neuter program, regardless of who the animals are or who the clients are or where in the world these neuter programs are performed need to be high quality, high volume spay/neuter. Just because a cat doesn't have an owner or just because we might be working in a third world country does not mean those animals deserve a lower standard of care. So there's a definition and this is another handout you have in the resources which is a document that defines the requirements for running high quality, high volume spay/neuter programs and describes it as efficient surgical initiatives that meet or exceed veterinary medical standards of care in providing accessible targeted sterilization of large numbers of dogs and cats in order to reduce their overpopulation and subsequent euthanasia.

The minimum standards that I think are especially important when we're talking about our TNR programs, which are largely staffed by volunteers often in temporary facilities, is that we're going to utilize procedures that are designed to protect the individual patients and the staff while attaining high levels of productivity. That's quite a challenge, so all of our patients receive appropriate and professional care, regardless of the situation. We use safe anesthetic and surgical techniques and that means that we are also using skilled surgeons. We have surgical asepsis at all times and we shouldn't be cutting any corners in their medical care that would risk infection. All of our patients, even the little cat neuters should be getting analgesics for pain control. Every cat has a medical record that's complete and our entire team is professional. Even though we have a lot

of fun at our clinics, this is a serious business. We're talking about life and death and it needs to be viewed as a medical professional activity.

I'm going to take you on a brief tour of our clinic. It is a high volume clinic. Remember that we're generally doing around 250 cats so we need to keep those surgeons cutting. It is organized for maximum efficiency, high cat numbers, we want to minimize the stress for the cats and minimize the cost per cat.

We use a system of having a series of six stations and the cats rotate through all of the stations to get their care, so each of our volunteers stays at one station so they can get very good at that one task that they need to do.

Safety is paramount, especially when working with feral cats. We do have an agreement with our animal control facility that if a cat bites somebody that we will report it and it will be up to animal control to tell us whether we have to quarantine it or whether the cat needs to be euthanized to be examined for rabies. And we just don't want any of our volunteers being hurt and we certainly don't want to harm the cats. So we never handle the cats awake. We'll show you how we manage to get these cats anesthetized in the trap. They don't come out of the trap until they're asleep and then they're returned into the trap before they wake up. So there really is no opportunity for a cat to escape or to bite someone.

Also you'll notice in all of our pictures that all of our volunteers wear gloves. This just protects them. These cats may have ringworm or other problems and it's just good hygiene to keep gloves on.

Our clinic actually is booked all month long in which we loan out traps. We have a bank of 400 traps. People from the public will be checking them out. They will get instructions on how to get the trap, how to humanely trap and how to bring the cats to the clinic and that morning when they arrive, they've got two hours to check in. Our volunteers make sure that they have come in a trap. They will be turned away if they come in another container. And we make sure the cat hasn't recently been fed but remember most of these cats were trapped with food so they probably did eat overnight.

All of our traps then are labeled with a unique cat identification number and we put two tags on top of each trap. One of those tags will come off the top and be put on the cat so it will be matched back up with its right trap and get back to the right caregiver. We do try to wring a little money out of these caregivers to help us run our program. We're not the best at that. We probably need some tougher people at our admissions desk and then tell them when to come back and pick up the cat.

This is what our waiting area looks like as all those cats are checked in and we just do first in, first out. So the first cats that are coming in are the ones we're going to do surgery on first and those will also be the ones with the earliest pickup time.
It all starts at anesthesia. We use a cocktail called Telazol Ketamine Xylazine or TKX. The benefits of it, it's a very small volume. It's a quarter mill injection; very easy to get. It does have rapid onset with little vomiting and it's partially reversible. The downside is that cats do sleep a very long time and can become very hypothermic during that time so we are working with other cocktails to try and get something more reversible and I would be happy to talk offline with some ideas for that.

We inject through the side of the trap as the cat is confined with one of these cones so it can't jump and that at recovery it receives pain medication.

Then this is the identification I was talking about. On the top of each trap are two of these twin tags and one of those will come off and put on the cat's paw. And then our transporters are actually the volunteers that move cats from one station to the next. This allows our station volunteers to work as fast as they possibly can so nobody's ever waiting around and cats aren't backing up in the system.

Before surgery, we have a station where they all receive a penicillin injection and have their eyes lubricated. The bladders on the females are expressed and each of the cats has an ear tip. And the ear tipping procedure is shown here. We put a hemastat across the tip, cut it off and you'll see that makes a nice square, a sign that this cat has been neutered and then there are some cats that have been returned to their colony and you can see how easy it is to tell that those cats have already been through the system and they don't need to be re-trapped. And then we always scan for a microchip and if we find a microchip, we try to trace the owner. Our neuters are a standard closed castration and the veterinary students perform all of the neuters for us. We do make sure to check. Sometimes it's hard to tell the difference between a neutered male and a male that has two retained testicles. If they do have retained testicles, we prep them like spays and they go to one of the veterinary surgeons. It is important to always remove all of the testicles because even though they might be sterile with a retained testicle, they still produce testosterone and that will be causing all that nuisance behavior that we have.

Here's a slightly graphic picture. For those of you who are not veterinarians and have never seen a cat penis before, this is what they look like. But there's a great tool to know if a cat is already neutered or if he has two retained testicles. Cats have these little spines on their penis when

they're not neutered and you can see that in the lower picture and those go away a few months after neutering. So it's a very easy was to tell with male cats if you have to open them up looking for a retained testicle.

The females can be harder. They can have scars or God bless all the spay/neuter veterinarians that tattoo their cats, you can do blood testing but very often we'll just do exploratory surgery because we have had cats that had a scar that looked like it was a spay and it turned out that they weren't spayed. It was a scar for another reason.

We make these spay boards which are just plastic boards that we tied the cats to and this allows us to get cats that are all prepped and to transport them to the surgery station without contaminating the prep site. And this also means that our surgeons always have a cat waiting for them. So all they have to do is change their gloves. Someone else will bring them a cat and take their other cat away so our surgeons can work as fast as possible. We do both midline and flank approaches. All of our cats that have mammary gland development because they're lactating will be spayed through the side so we don't interfere with that and all of the other cats will be prepped on the standard midline incision that you see here. So in this picture you see one of each.

As I said, we should have these cats prepped as fast as the surgeons can do the surgery. We want the surgeons never to be waiting for a cat because that decreases our productivity. The surgeon should just have to change their gloves and the assistant should be moving cats, opening up a new pack. We do spay all cats. This is a policy decision your group should make before confronted with the issue. But pregnant cats, lactating cats, everybody who gets to us is spayed. And our veterinary students perform spays alongside the volunteer veterinarians once they've had their clinical surgery rotations. And our veterinary students at the University of Florida get an extraordinary amount of spay/neuter experience. Some of them have done hundreds of surgeries before they graduate and that contrasts to the time when I was in veterinary school where we might do three or less surgeries before graduation. So if anybody is out there looking to hire a good spay/neuter vet, you contact me offline and I'll send you some names.

Then next after surgery, the cats get their vaccine. So we give a rabies in the right hind leg, FVRCP in the left hind leg, and every cat has a detailed medical record that travels with it so at each station the volunteers there are recording what they did and what time they did it. We also record on these any special findings such as injuries or special treatments and notes to the caregiver.

Then post surgery we put a topical treatment on. This might be Revolution or Advantage, depending on what we have. We can order fluids if needed and then we reverse the anesthesia to get the cats waking up as soon as possible and that's also when they get their pain medication.

We do use a freshly autoclaved spay pack for each animal. We don't do any cold sterilization or share any instruments between cats because we want them to have no risk of disease transmission. We have pretty cheap instruments and it's a very small pack so they cost us about $30 each and we have about 150 Spay Packs. The instruments are scrubbed and autoclaved all day long so that they're ready for the next days work or the next month's work.

Then when the cats get to recovery—this is an older picture. I don't use shredded newspaper anymore because it's messy but we line the trap with newspaper and it's important to emphasize that the cats be continuously monitored. No one should ever leave cats that are not fully recovered because this is actually where cats are most likely to suffer a cardiac arrest. This is true in private veterinary practice as well as when—in our clinics as well and this seems to be a time when volunteers think that the cats are out of the woods and it's really the riskiest time of anesthesia.

Finally our caregivers return. Here's a family—we do these clinics on Sunday—returning from church to pick up the cats that they care a lot about. So they're given written discharge instructions about what to look for as well as emergency contact information which has my cell phone number on it so if there is an emergency I can meet them back in the first couple days to take care of them. We tell them to leave the cats in the traps overnight and return them to the colony the next morning if they're fully recovered. If they have a cat that's lactating and we know there might be kittens out there, we try to get those cats awake as soon as possible and back to their babies.

We've been doing this at the University of Florida since 1998 and we've spayed and neutered over 35,000 cats here at the vet school. We're extremely proud of this. It does make us one of the very biggest programs in the country, however, remember we think there's about 41,000 cats here in our community and we're only neutering less than 10% of those every year so the rest of them are reproducing faster. So we need to find a way to make our program even more effective.

One of the questions that always comes up frequently in medical decisions is, "What about rabies? You're only giving them one rabies vaccine. We know technically it needs to be boosted in a year. Can cats even respond to a vaccination given under these stressful conditions?" And there's a number of papers that have been published to show that even a single

vaccine given to a kitten or an adult cat is very likely to give them years of protection. And we've also vaccinated cats in our program and then retrapped them a couple months later to see how well they responded and we see in this graph here that there was a very low proportion of cats that have protected antibodies against rabies before they were vaccinated and when we re-trapped them a couple months later, it was 99% of the cats were protected against rabies. And that's the same proportion that you would get from vaccinating pet animals. And because we know even a single vaccine lasts for years, we think we're promoting public health in a very dramatic way.

Another question that comes up is, "What about FeLV and FIV?" I'm on the AAFP Guidelines and we recommend that every cat be tested and then we make an exception for community cats and feral cats. And it's largely a question of resources. I keep mentioning we need to neuter as many cats as possible and yet it's very expensive to do so and so we have to make some very strategic decisions on what we're spending our money on so we can maximize the number of cats that are neutered.

We used to test. The vast majority of cats that were positive and looked completely healthy. We would euthanize the cats during the clinic. This was very disturbing to the volunteers who often disrupted the clinic as they scurried around trying to find alternative placements for these cats. But really we stopped doing it when we looked at the very low proportion of cats that were positive and how much money we were spending on testing.

It's also important to think about how do cats spread these diseases. FeLV is primarily spread from infected mother cats to their kittens. So if we can neuter those positive cats, even if we put those infected mother cats back, they're not going to have any more infected kittens. And FIV is primarily spread among intact fighting tomcats. And once cats are neutered, they don't fight nearly as frequently so neutering is the single most important thing you can do to stop the spread of FIV.

If our programs do more neutering because we're more strategic in how we spend our money, we may actually control these infectious diseases faster than if we test and euthanize the few ones that we come across in smaller neutering programs. And we are talking about herd health. We're talking about this huge population, the tens of millions of cats. We've got some data that I'll show you on the next slide that feral cat infection rates are similar to the infection rates of outdoor pet cats and nobody is demanding that outdoor pet cats be trapped and euthanized if they're positive.

This was an email I received. This program was struggling to do more cat neutering and looking at their budget and they said, "Last year we had 35 positive cats and spent $14,000 on testing alone." And they would really have a heart-to-heart with themselves about whether they could spend that $14,000 in a more meaningful way. So most large TNR programs do not test for retroviruses.

This is a study we did of collecting test results nationally from veterinary clinics and shelters all over the country. We tested 18,000 pet and feral cats. On the left side, you see the healthy cats and you see the indoor cats have the lowest rate of infection, followed by outdoor pet cats and feral cats which had the same rate. There wasn't a difference between these two populations. We do see a difference, however, on the right side where we're looking at sick cats. So being sick is a risk factor for being infected with one of these viruses and it looks like it might be a little bigger risk factor for the feral cats. If you want to do some testing, you might focus just on the sick ones.

Here's a model and again, don't worry too much about writing down all the numbers. You'll get a copy of this but what I show is the difference between neutering more cats by dropping testing which preserves resources for more neutering. Actually, if you, in this example, neuter 2,000 cats but don't test, you would end up at the end of the year with 80 positive cats. If you did nothing, you would end up at the end of the year with 260 positive cats because some of those positive cats had kittens. And if you only neutered half as many but you tested and removed your infected cats, at the end of the year you would have 126 infected cats because some of the cats you couldn't get to because you didn't have enough money.

This is again, you could put any numbers that you want in there and answer the question for yourself about whether diverting resources into testing is going to be of benefit. And our feeling is that mass sterilization controls both kitten births, which is our welfare goal, and the spread of FeLV and FIV.

I just love this sweet picture of two free-roaming cats and this is a picture I use when I think about do we need to just cull these cats from the environment because they're homeless and we're worried about their welfare. And then you look at these cats and they think their welfare is pretty good. Yeah, that's a nice picture.

Laurie Peek: Here's another poll question. Is Trap-Neuter-Return or TNR a resource available in your community's cat management toolbox? "No, our community has no TNR program."; "Yes, some people use TNR in our community for a relatively small number of cats."; "Yes, TNR of

unowned cats has become a major component of lifesaving in our community."; "I'm not sure but I hope so."; and the last one is "I'm not sure but I hope not." Please answer the question and, let's see, I'll just give you another moment. If you haven't answered yet, just go ahead and please select an answer.

Okay, just one more moment. Okay, so we're getting some good answers. A lot of you are still answering so I'll give you another second.

Julie Levy: That was a challenging one.

Laurie Peek: Yeah, still lots of answers. That's great. Well, we really appreciate you taking the time to answer these poll questions. I'll just give you one more second and—, I'm going to go ahead and push the results so quickly answer. All right, here we go.

So 12% said, "No, our community has no TNR program."; and 52% said, "Yes, some people use TNR in our community for a relatively small number of cats."; and then 31% said, "Yes, TNR of unowned cats have become a major component of lifesaving in our community."; 5% said, "I'm not sure but I hope so."; and less than—well, 0.1% said, "I'm not sure but I hope not." So thank you for taking the time to answer that.

Well, this is very interesting and I'm really glad to have a national view of what's happening across the country. It does look like many communities are what we have here in Florida too which is TNR is out there, it's being practiced but probably not at the scale that you'd like it to be but look at that. Thirty percent are starting to have major use of TNR to address their cat issues and that's exciting and I'd actually like it if some of you who have big programs can shoot me an email and describe what you're doing because I'm always looking for new ideas about how to make our programs better.

What we always want to know and what the policymakers that we go to for support want to know is, does TNR work and I think it is very important to define what you mean by work. It certainly works by improving the welfare of the cats that come through our program. It also works by preventing the birth of many millions of kittens who most of which would not survive to adulthood so those kittens have a very high mortality rate as youngsters and that's a lot of suffering that we prevent by doing TNR. We also know that TNR can work on a small scale within a colony and I'll show you some data from that. And then we have less data showing whether we can get these programs to be big enough to control it on a larger scale like a community-wide scale. But we shouldn't be trapped into saying there's only two answers to does TNR work or not.

This is another picture of the cats that are awaiting surgery in our vet school program. So here's our paper that I can provide to anyone who's interested in this but this is really the best documented experiment in TNR. This is a program that's been going on for a long time at the University of Central Florida. It's a very large campus with a very large population, almost like a small city during the day. You can see it's well developed in the center and then it's surrounded by woodlands. And as typical at many institutions, the campus authorities had considered living cats to be a nuisance and conducted trap and removal campaigns from time to time when cat numbers increased. The students and employees sabotaged these efforts because they were feeding the cats and were attached to them, so it was constant conflict and it never resolved the problem. So, in 1991 some of the staff kind of invented TNR on their own. They didn't know that it was something other people were doing. It just seemed logical to them and they did it kind of underground. But what you see here, they had identified all of the cats by 1996 which is where this graph shows and by neutering all of the cats, you can see that the population of cats dwindled over time. It didn't dwindle that fast, even though almost half of the cats were removed for adoption. So these cats actually thrived and survived for a very, very long time and today there's about 10 cats—old cats left on campus. This is the longest and best documented TNR study that there is. Some of the studies that have claimed that TNR does not work and in some cases there's very good evidence it didn't work because the programs were not well managed, and in other cases they were only like a year old and they just weren't long enough to see if they worked.

Here's another example. It's not published from Florida but it's gotten a lot of attention. Ocean Reef is a very fancy gated community in Key Largo. And they, too, had taken a traditional approach of repeatedly removing cats and just found that that was never successful so in this case the community association built a feral cat center which was a veterinary hospital and a small sanctuary. And this is unusual because usually it's the community association that's complaining about the cats and in this case they decided to manage the cats in a very humane way.

Most of the cats that went through their program were neutered and returned. Some of them were adopted and about 100 of them remained at their sanctuary and this is a picture of them calling the cats, and you can see some of these cats are pretty chubby, on the golf course. And so during the time that this data was collected, the population of cats in this community decreased from about 2,000 to about 500 cats and the population is even lower now. And this is important because adjacent to this housing development are some very endangered species of rodents. There was concern that the cats might be predating on. It's still

controversial about whether they did but certainly everyone agrees that the situation is improved when the cat population is reduced that much.

And then finally I want to talk about a study that we've done that's not published yet but we did it here with Maddie's Fund in Alachua County, Florida. We know that we could decrease colony size but we wanted to know if we could scale it up to a larger scale because we do dilute our efforts somewhat by neutering cats all across the county. So we picked a zip code that was sending a lot of cats to Animal Control and intensively neutered in that zip code. We neutered over 1,000 cats a year for two years. We estimated that was slightly over half of the free roaming cats in that zip code. We also mediated complaints so Animal Control referred all cat complaints to us to try and solve and in most cases, if we went to someone's house and face-to-face discussed what their issue was with cat nuisance, we could almost always resolve it without removing the cats. People just want to know that their complaints are heard and that someone cares about improving the situation.

So what you see in this graph is the decrease in cat intake at the shelter so that was our goal. We wondered if a TNR program could reduce cat intake at the shelter which is largely nuisance mediated. So the blue line is cat intake from the rest of the county, the part that we didn't intensively neuter in. And the red line is our target zip code and what you see is a 68% decrease in cat intake from that zip code compared to only a 13% decrease from the other zip code. So in my mind, this is strong evidence that we can impact intake at our animal shelters by having very intensive neutering and resident support in the community.

Now I want to turn to a program that really excites me and it's an idea that's spreading across the country. I'm going to talk about the story of Duval County which is the same thing as the city of Jacksonville. They are equivalent land mass. This is the largest land mass country in the U.S. In 2007, which is the baseline year I'm going to talk about, there were almost a million people living there. And that made us estimate that there were about 143,000 community cats. That year Jacksonville Animal Care and Control impounded over 13,000 cats, a huge number. Their shelter was overcrowded with 200 to 300 cats at a time. They only adopted out 521 cats in a whole year out of this huge number of intakes. It's just amazing and they were keeping this huge number of cats in a shelter, realizing that very few of them would ever get out. And so the vast majority of cats ended up getting upper respiratory infections and then would be euthanized after they became ill. Their live release rate at that time was less than 10%, just a tragedy for cats.

We were actually invited by this shelter to do a shelter health consultation with them. That's a pretty brave step for a struggling shelter that's under

some public attack to take because we are pretty strict when we come on these consults and we don't sugar coat it. And you'll see from this introduction to our assessment report that we said the facility and staffing levels were grossly inadequate for the number of animals on hand at the time of the consultation, resulting in a breakdown in care that allowed substantial animal suffering, illness and likely unnecessarily high levels of euthanasia and death. And these are the conditions these animals were being housed in—you know, eight dogs per run, multiple cats per tiny little two by two cage and very scary conditions.

We always do a data analysis of the population statistics in our consultations and what we see here are the lines for the two years before we came and visited in 2008. And the first one is the shelter inventory and you can see that they were routinely housing 200 to 300 cats at a time. This staff was not staffed up to take care of this many animals so it was very stressful for the staff and they could not provide the care that they needed to. And, in contrast, look at the live release rate consistently less than 20%, usually less than 10%, so very few cats getting out alive despite the huge numbers of cats they were keeping.

Rick DuCharme, who is quite an innovator, he's the director of First Coast No More Homeless Pets. He actually just went to the shelter to ask if they could get their ear-tipped cats back. So that's very common. The TNR programs usually try to get the cats that might end up in Animal Control that they've already passed through to return to their colonies. So the interim director of the shelter at that time—he was an engineer. He wasn't a shelter director and he's a numbers guy. So he said, "Well, why do you just want the ear-tipped cats back? Why don't you take all the feral cats?" And Rick gulped and said, "Sure."

He calls this The Year of Big Solutions. With funding from Best Friends Animal Society, Feral Freedom was born in August of 2008, the peak of kitten season—the partnership between the nonprofit TNR group, First Coast No More Homeless Pets and the County Municipal Shelter to reduce cats intake and euthanasia. In this program, all feral cats that come into Jacksonville are immediately turned over to First Coast for No More Homeless Pets, so cats are intaked, they get an intake number at the shelter, they're put in a special room in their trap and twice a day, the TNR program comes over and picks them up. And it's the nonprofit group that pays for the neutering and then returns the animals back to their environment.

And this targets nuisance cats in the community because these are the ones that the public is trapping. So how does it work? Citizens borrow traps from the municipal shelter. Animal Control offices then pick up those trapped cats, bring them to the shelter and the First Coast picks up from

there. Once the cats arrive at the spay/neuter clinic, they have their surgery, ear tip, vaccinations and parasite treatment. They're kept at the spay/neuter clinic overnight to recover. It's a system very similar to our Operation Catnip system.

But what's unique about this program is the cats are returned to the trapping site without asking the people if they want the cats back and that's the wrinkle that's really quite unique. The cats are returned and then flyers are put on the doors surrounding that area explaining that this is how the city has elected to manage free-roaming cats. What's been amazing and I think quite a surprise is that there aren't more complaints about the cats showing back up. I think this surprised everybody.

When we look at how things have evolved since this started in 2008, they've neutered over 15,000 cats that came from the program so these are cats that would have been euthanized at Animal Control. Almost 1,000 were sent to rescue. When rescue has hones, it's great to give the friendlier cats or the kittens to them. A very small number of cats are euthanized for being in poor condition. A thousand cats were trapped more than once so these would be cats that had ear tips that ended up being transported. But the amazing thing is that they had a 59% decrease in adult cat euthanasia and 19% kitten euthanasia and the reason it doesn't impact kitten euthanasia as much is because very small kittens are not included in this program.

Here's that slide again I showed you of the crowding at this poor understaffed facility was trying to deal with and this is what happened to their shelter inventory after implementation of the transfer program. Can you imagine taking care of less than 100 cats at a time and the quality of care that could be provided under those conditions compared to the amount of care that cats got under the old conditions? And even more dramatic is look at this line. This is that graph I showed you of live release rate over the years and what it would have been had all the cats continued to be euthanized. And this is the live release rate in Jacksonville today with the program intact. And what you see is especially in the winter months when there's not a lot of kittens, is this shelter which used to consistently euthanize over 90% of its cats can achieve at times a lifesaving rate of over 80%. It's truly amazing.

What they did was very stealthy. They ran this program quietly as a pilot program without talking about it too much for two years and then they wanted to update their municipal code to make it a standard city policy. The clever idea with this is when a few people complained about ratifying this feral cat program, they said, "Well, we've been doing it for two years and nobody's complained so it must be okay." So people were much more comfortable approving quite a radical code change because there hadn't

been a problem recognized and I have included in the resources the complete municipal code because it's quite progressive. It's one of the few codes I've seen that actually explains why certain things are done and it's also one of the few codes I've ever seen that articulates the desire to save lives. So I love this quote, "The city of Jacksonville recognizes the need for innovation in addressing the issues presented by feral, free-roaming and other community cats. To that end, it recognizes that there are community caregivers of cats and acknowledges that properly managed community cats may be part of the solution of the continuing euthanasia of cats." It goes on to define community cat as "Any free-roaming cat that may be cared for by one or more residents in the immediate area who are known or unknown." A community cat may or may not be feral so it's very inclusive of any cat that's out in the environment and they're saying we don't have to know who the caregivers are. Community cats shall be distinguished from other cats by being sterilized and ear tipped. Qualified community cats are exempt from licensing stray and at-large provisions of this ordinance and may be exempt from other provisions directed towards own cat. So it clearly articulates that you don't have to license them and do other things.

They do require that community cats be sterilized, vaccinated and ear tipped. What I love is they say if a person is providing care, they need to do it daily and they can't allow the cats to suffer. But it doesn't say that every cat has to have a caregiver. I think we have to acknowledge that if we trap cats that are fat and fluffy and doing well, they are clearly enjoying life and living in a situation where they're finding their resources whether we know what those resources are or not because I really think we should start to evolve from these very highly-controlled and restrictive programs that require a lot of documentation. If the cats are thriving, we ought to just improve their lot and let them be.

And they did say that a caregiver certification program may be implemented by the city so if there are caregivers who are a problem they can be regulated.

And I threw in some other things that I really like. They define litters of puppies and kittens less than six months old without a nursing mother as not having a hold period. This is very important because a lot of youngsters come into our shelters as strays and if we have a rigid stray hold period, it forces us to keep these puppies in a very hazardous environment. So they say if it's a litter, they can go ahead and disposition them immediately, which usually means getting them out to a rescue group immediately. They don't have to keep them. There is no hold period for feral animals. This is what allows them to immediately transfer to the TNR program.

What I also like is a part of this statement that due to the low reclaim rate and high euthanasia rate for cats, all cats that do not have positive traceable identification may be sterilized immediately upon intake and placed in the adoption area as soon as two days after impound. They still have a six-day hold for cats but what they do is that this allows them to start preparing them for adoption or transfer, even though they haven't finished their hold period so they can move out faster.

Is this catching on? Why, yes, it is. We have received a lot of calls around the country from people wanting to explore this approach. Here the City of San Jose has made a Feral Freedom Program its approach to community cats. Again, what makes this a unique TNR program is cats are transferred immediately to the TNR program and they don't have to identify a caregiver in order to enter the program. It's just policy of the city to do this. This is Charleston, South Carolina, another program. This is in Utah in Salt Lake City. So, we've been very excited. Municipal leaders in Jacksonville have been big proponents and this program is several years old now and they still love it so it's really starting to spread. That's great.

Laurie Peek: Here we have another poll question. This is, I believe, our last poll question. How do you feel about the Feral Freedom Program in which feral cats are immediately transferred to a TNR program? "Love it. Our community already has a similar program."; "Love it, wish we could do it."; "I don't support it because it's not safe and humane for the cats."; "I don't support it because it's not good for the environment."; and "I'm still thinking about it." So how do you feel about the Feral Freedom Program in which feral cats are immediately transferred to a TNR program?

Hopefully you guys are getting this poll and able to answer it. I'm just going to give you a couple more minutes because it looks like a lot of people still haven't had a chance to answer it. If you haven't answered it, please go ahead and answer the poll question. I'll just give you another moment. They're coming in kind of slow so bear with me, they're still coming in. I really love that picture, Julie that you showed of the cats with their tails tangled around each other.

Julie Levy: Yeah.

Laurie Peek: We've still got people answering this poll question but they're just coming in pretty slowly. I'm sorry it's taking so long but many people are still answering it. I'm going to go ahead and push the results. I'm sorry if you didn't get a chance to answer it.

Okay, so 13—or 14% said, "They love it."; and 82% said, "They love it and wish they could have it."; 0.8% said, "They don't support it because

it's not safe and humane for the cats.": 0.4% said, "I don't support it because it's not good for the environment"; and 2.5% said, "They are still thinking about it."

Julie Levy: This is really exciting because I think we have some decision makers on the phone from municipalities and nonprofit groups together and there seems to be a fairly good consensus that this is something that should be tried and I think it's now up to us as program managers to find a way to make it happen.

I thought I'd finish with this picture I just love because I have trapped cats myself and it's not always this easy but I now wonder if maybe I shouldn't just scatter some cardboard boxes around because that seems to attract cats.

And so on this slide, my final slide, it's got my email address. If you have questions that need to—that you need to send to me that we haven't answered in this section, you can reach me there. We're also going to provide you with some other contact information and the resource library that we provided has a great deal of information. And I have to thank Maddie's Fund for making our program possible. Maddie's Fund has been incredibly generous to us and made it so that we can expose hundreds of veterinary students to humane sheltering and increase their skills in helping homeless animals find those forever homes, whether they're in the community or in a traditional home. And we also provide shelter consulting services that are subsidized by Maddie's Fund so thank you so much for making this great career possible.

Laurie Peek: Well, thank you, Dr. Levy. We have time for a few questions. I'm going to go ahead and post the questions on the screen here. Here is the first question. Hopefully it's coming up. Can you see that question? I can't see it.

Julie Levy: Yeah, I can see it. It says, "Where can I get more information about Operation Catnip?"

Our executive director, Shea, would be very happy to provide email consultation. We're right in the middle of a big website redo project so we don't have all of our content on the website but we're turning it into a training center that you'll be able to access a lot more detail about our protocols. Also we are in Gainesville, Florida which is north Florida. We love visitors and I can say that when we first started our program, we tried to follow other people's manuals and we just could not figure out how to get the cats done like we wanted until we went and visited our mentor program which was the Feral Cat Coalition in San Diego. Seeing it firsthand in person changed everything for us and we love to have that

same transformative effect on other groups. So if you're going to be coming to Florida, please stop by one of our clinics. I think it will be really exciting for you.

Laurie Peek: Great, I am having a little trouble here with the questions so hopefully somebody can help us push the questions for you. It doesn't look like my system is allowing me to do that.

Julie Levy: Okay, well, I can also say that Shea's contact information if you'd like details about how our program works, where we buy our supplies, how much things cost, Shea is the woman for you, and her email is ocgainesville@gmail.com. We also have a Facebook page and you can get our contact information there. There it is.

Laurie Peek: All right, so I'm going to try to push the next one. I'll go ahead and ask, "Where does funding for most of this work come from—the vaccinations, the supplies for spaying and neutering?

Julie Levy: This is, I think, of course—in sheltering the funding is always the biggest challenge that we have. These are not cheap programs to run, even if you're using volunteers like we do. Our cost is $30 a cat so it adds up fast. So we raise all of our funding locally and we have a little bit of grant support nationally so we ask our caregivers to do what they can but they actually only on average donate about $5.00 per cat. So we have to do our own fundraising and grant writing to make up the difference. The Big Feral Freedom Program which was a $1 million plus program was funded by a very generous grant from Best Friends Animal Society but they're obviously not going to fund all of the programs that are springing up around the country. So I think our executive directors really have to do their work to help keep these programs funded.

Laurie Peek: I'm going to try to get the next question. The things are responding a bit slowly. "Do you leave the traps uncovered as they are awaiting induction?"

Julie Levy: Yeah, we actually—that's something we struggled with because we do like the cats to be covered so that they don't feel so exposed because they're very intimidated and so the caregivers usually will have them covered when the bring them to us. What we've struggle with is having them in a way—because we frequently will need to have like more females or more males, whatever it is to keep the balance in the clinic and we need to see the cats to make those different selections. Also we've had trouble getting the covers back to the caregivers that it belonged to so we've tried a few different things and haven't established an answer that we really like yet but we do recognize that as something we need to continue to work on.

Laurie Peek: Okay. "So what are you suggestions for convincing municipalities not to accept feral cats at the shelter?"

Julie Levy: I think the answer is really you need to provide a better solution. I don't think you can go to Animal Control and just stop saying this. Nowadays, even if animal control want to do more, they frequently have less resources than ever and so it really is often going to be the private sector that's going to come up with these solutions. So I think putting together a coalition that can offer them an alternative and having the material backing to do it is a way to start. And I also think a way to start that's not so scary is to start a pilot project. Say, "We're going to do a three-month project, we're going to carry it out and then we're all going to regroup and see how it went." And almost anybody can sign onto that. But you do have to make sure that you organize enough so it goes well.

Laurie Peek: Let's see. "When feral cats come into an animal control and we have the resources to spay and neuter them, should they be re-homed back to exactly where they were brought from or relocated to managed colonies? How do you successfully relocate?"

Julie Levy: That's a very good question. It comes up a lot, especially if there's a perceived new sense in a perception that they should not be returned exactly where they came from. My strong preference is they should go back to their home. Remember we're taking them from their homes from the other cats that they know and relocating them is very, very difficult. For one is it's very hard to find places that are appropriate for cats that don't already have cats. Also cats have a very intense homing instinct and no matter how hard we try to get them to adapt to a new location, they frequently leave and try to get home. So there are very few circumstances in which I feel compelled to relocate rather than to try and make their current home work. However, if you do want to relocate, it's very important that the cat be confined for several weeks to get used to their new environment. There are several good resources for how to do that at Alley Cat Allies on their website and a couple good videos as well on YouTube. But the main thing is to securely confine the cats for several weeks. I also like to relocate small family units together rather than individual cats because I do think that they may feel more secure if the other cats that they know are with them at the new location.

Laurie Peek: This question says, "I can't keep up with the spay/neuter of adoptable animals in my shelter. How can I make a different in my community for community cats when there is very little support from the veterinary community and I only have so many hours in a day?"

Julie Levy: I can totally relate because we all only have so many hours in a day and so much good work to do. It's very easy to get burned out and discouraged and I think this is a huge hazard in the humane community that we have. And it is important to take care of yourself because if you're burned out and ineffective, you can't help the animals as much. So I think it's very important to form effective collaborations. You can't work alone. You've got to join other people who are effective and put together strong working groups that actually get work done. And a lot of times the coalition you might want to put together may not be people you think of. You should look outside of people who love animals and go to the movers and shakers in your community and get them on your boards and get them wielding their influence to get all the important work done.

Laurie Peek: We have time for a couple more. "How are you coming up with the calculation for the community cats and how are you calculating the kitten survival rates?"

Julie Levy: So the calculation for the number of community cats is based on that series of surveys that I showed you of the prevalence of cat feeding of unowned cats across the country. So the prevalence ranges anywhere from about 10% to 22%. You take an average of that. These are people who say they feed cats they don't own and just extrapolate that to the rest of the country. Now we might be underestimating the number of cats by doing that because we're not counting the cats that aren't fed. On the other hand, some cats may be fed by more than one family and so that would tend to overestimate it. So those are the best numbers that we have right now.

The data on kitten survival rates is meek. There is one study that showed 50% survival to three months and another study that showed only 25% survival to the age of six months which is reproductive age. So we know that probably half to less of the kittens actually survive to adulthood and that's very typical for other small carnivores.

Laurie Peek: Dr. Levy, "Have you worked with any programs or partnerships between shelters, community cat communities and public land mangers? What would you advise on doing this to avoid dumping abandonment on public lands and also, any ideas on connecting with tourism?"

Julie Levy: This is a really great question because I really think our biggest conflict is what to do about cats that are perceived to be a threat on public lands, either a nuisance threat or a threat to wildlife in public parks, etc. I do think that avoiding dumping is very important and that means that we need to be very discreet in our colony management. If we have colonies on public lands, they should be a place where they're not obvious to the

public or there shouldn't be signs that indicate the cats are being cared for there.

So the feeding station should be moved to an areas where people aren't going to really see them because that will encourage dumping. But we also need to look at why do people dump and I think it's because they feel they don't have alternatives. For some reason they don't feel like they can keep that animal and they're afraid to take it to a shelter and the reason they're afraid to take it to a shelter is because they're afraid that cat will be euthanized which is a very legitimate fear in many places. So part of our job is to change those outcomes so people are more confident with the options that they have.

And then for connecting with tourism is interesting because the cats can actually be a tourist attraction. There are some hotels in tourist areas that have created these cat cafes and the tourists actually like to go watch the cats being fed and in the cases where there are friendly cats, the cats will actually socialize with the tourists.

On the other hand, we can see public areas where they're afraid of the cats mingling with the tourists and we're actually seeing that at the Disney hotels right now where they are removing the colonies that had been previously TNR'd and there's a huge uproar from the people who love the cats there and the hotels feel right now that they have a liability issue if they allow the cats to remain. So both of those are common situations and I think this is where we really need to go and have face-to-face meetings, find out what the issues really are and then try to mitigate those issues on a one-by-one basis.

Laurie Peek: Well here is the last question. "FIP – most cats from multi-cat environments test positive for exposure but the test doesn't differentiate between those who will develop the disease. Who is an asymptomatic carrier and who simply has been exposed? Is there any progress in a better test?"

Julie Levy: Great question. The answer is no and no. Despite a lot of very brilliant scientists working on the FIP problem, we really are no farther away than we were decades ago. There is not test for FIP. There is a test for coronavirus but many, many cats have coronavirus. In fact, all of you on this call, about one-third of your cats are probably positive for coronavirus but they're not going to develop FIP. FIP is a rare consequence of coronavirus infection so it is completely inappropriate to be using a blood test or a fecal test in a shelter situation or otherwise a screening tool for FIP; no such test exists, sadly.

Laurie Peek: Thanks, Dr. Levy. Well, that's the end of our event and we want to thank Dr. Levy and all of you for your time tonight. We hope you will take what you've learned here and bring it back to your shelters and your communities and most of all to the cats. For those of you who signed up to receive CE, we will be emailing you your certificate within two weeks' time. Please click on the link to take our survey—I'll just try to get it up here. It might have been blocked by your popup blocker or be on a different screen. If it is, we'll be emailing you the link and we'd appreciate it a lot if you could take a few minutes to respond to it.

We also hope you'll come to www.maddiesinstitute.org and check out the other events we'll be presenting. We have several upcoming webcasts on using data to evaluate and improve your shelter or rescue operation. We also have many recordings from some of the top shelter medicine specialists in the country and you and your staff will have an opportunity to receive a Maddie's® Certificate of Attendance for watching. Please sign up for our mailing list at Maddiesinstitute.org and also follow us on Facebook at Facebook.com/maddiesinstitute and on Twitter at Maddiesint.

We hope you checked out the resources in the widget at the bottom of your screen but if not, we'll be emailing the links to you as well as contacting the winners of our drawing and sharing a link to the archive version of tonight's webcast. So thanks again for being here with us this evening and good night.

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