

Abstract

The Vanderburgh Humane Society, Inc. (VHS) was founded in 1957 to provide protection for homeless animals, intervention for animals in abusive environments, and community education to encourage the prevention of animal abuse and pet overpopulation. Located in Evansville, Indiana, the VHS serves as a surrender and adoption agency for unwanted pets. While located in Vanderburgh county, our services and programs benefit animals and their people in any county. In fact, in 2020, 35% of the animals we sheltered came from Warrick, Posey, Gibson, and other counties. We serve more than 11,000 animals every year through sheltering, spay/neuter and wellness services, emergency food assistance, and various other programs, as well as offer reasonable-cost spay/neuter and vaccination options to meet demand. We have an overarching mission of leading our community to eliminate pet overpopulation through Spay/Neuter, Adoption, and Humane Education.

Within these counties listed, there is a large population of feral cats- un-owned domestic cats that live outdoors and largely avoid humans- that will only increase if left unchecked. These cats have a low quality of life as they are often facing dangerous situations such as dogs, wildlife, cars, people, and disease that can and often are life-threatening. In addition to this, feral cats, which are considered invasive species, often have a negative effect on local wildlife populations due to their hunting practices. Furthermore, many communities do not view feral cats as good neighbors. This is why the VHS views the feral cat issue as a pressing matter that needs to be addressed.

VHS is seeking to implement a Trap, Neuter, Release (TNR) program at the shelter to address the aforementioned issue. This program would be run by both volunteers as well as medical professionals that will carry out the surgeries on Monday, Wednesday, and Friday mornings between the times of 8 am and 10 am. No appointment necessary. If there is a large number of cats being brought in or a different time needs to be planned for, appointments are available. All cats that are brought in for the program will receive their spay or neuter as well as vaccinations. In addition to this, the left ear of the cat will be tipped in order to identify which cats have been altered. The cat will then be held at the shelter until it is well enough to be returned, this is estimated at one full day, and can then be picked up the next morning starting at 8 am. The community member or volunteer will then release the cat back to its original location. This process is designed to be run smoothly and quickly so as to alter as many community cats as possible.

This program aligns directly with the VHS mission to reduce animal populations and educate the public, and this is why the shelter sees this program as something that is incredibly important to implement. TNR is the most efficient and humane way to control/eliminate animal overpopulation and this program allows us to further educate our community about the importance of spay/neuter and correct animal care.

The goals VHS aims to accomplish include: spay/neuter 75% of the feral cat population, educate the public and most specifically cat owners, and help heal local wildlife numbers damaged by feral cats. This will be evaluated through close record keeping of the intake of feral cats that will show the trajectory of the feral population.

Through the implementation of this project, VHS expects to see a dramatic decrease in the feral population. Within the first year, our aim is to have altered and vaccinated a minimum of 123 cats. To aid in this goal, Vanderburgh Humane Society is asking for \$\$29,387. This budget will go toward the cost of hiring a vet as well as the supplies that will be needed to carry out the surgeries and vaccinations.

Title Page
Vanderburgh Community Cat Control and Care
Vanderburgh Humane Society
<https://www.vhslifesaver.org/>
Kyla Schlink
kjschlink@eagles.usi.edu

Organization Profile

The mission of Vanderburgh Humane Society is to lead our community to eliminate pet overpopulation through Spay/Neuter, Adoption, and Humane Education. A Trap, Neuter, Release program goes hand in hand with this mission as it directly helps to control the overpopulation of cats within the area and allows for our shelter to reach out to the community and give them education on the issue of overpopulation.

VHS serves not only Vanderburgh county, but also Warrick, Posey, Gibson, and others. We serve more than 11,000 animals every year through sheltering, spay/neuter and wellness services, emergency food assistance, and various other programs.

The Vanderburgh Humane Society was founded in 1957 to provide protection for homeless animals, intervention for animals in abusive environments, and community education to encourage the prevention of animal abuse and pet overpopulation. What started as a small group of residents who longed to help Evansville's animals soon turned into a large-scale organization designed to help animals all over the midwest. Adoptions & rescue transports have increased while euthanasia has drastically decreased, and in 2020, we reached a live release rate of 91% for the first time ever. This places us within the industry standard "no-kill" benchmark of 90% or higher. Additionally, in 2007, the Davidson Rausch Low-Cost Spay & Neuter Clinic opened at the Vanderburgh Humane Society and is still running to service members of our community and their pets at affordable prices.

VHS allocates a large amount of our budget to our program services- low-cost spay/neuters, low-cost vaccinations, adoption services, educational programs, and Safe Pets program for domestic violence victims. In 2019, these programs cost the shelter \$936,154. Our next biggest expense is paying our administration- this cost us \$464,799. Additionally, we spent \$163,751 on fundraising for the shelter. VHS is able to earn some of this money back through generous donations and grants and through programs held throughout the year.

Problem Statement

Cat populations in the US are an ever-growing issue. Most notably, feral cat colonies are forever doubling. According to Susan E. Little, a professor in Veterinary Parasitology at the Center for Veterinary Health Sciences at Oklahoma State University, a single female cat is able to birth five litters a year with sizes ranging from one to twelve kittens per litter (Little, 2012). Joan Meiners, an environmental reporter, states that scientists currently estimate that in the US alone, there are anywhere between 60 million and 160 million feral cats (Meiners, 2018). Knowing this number and understanding the number of kittens one female cat can produce in just one year, it can be understood why cat populations are able to become so large.

But why are feral cats a problem? Well to start, cats are an invasive species, meaning that cats adversely affect the environment they are introduced to. National Geographic reported that cats living outside naturally prey on birds such as cardinals, blue jays, and house wrens. Most worryingly, however, is cats' effect on rare and endangered species, such as piping plovers and Florida scrub-jays (Mott, 2004). In addition to the effects cats can have on the environment, they also burden Animal Shelters which are already understaffed and underfunded. ASPCA reported that approximately 3.2 million cats enter shelters every year. Of these cats, 860,000 cats are euthanized (ASPCA, 2018).

It should also be pointed out that very few feral cats can be adopted or live inside. The socialization window for cats is between zero and twelve weeks according to Hannah Shaw, an animal advocate, educator, and kitten rehabber (Shaw, 2020). After this time, the chance to tame a feral cat becomes smaller and smaller. This means that the only place for feral cats to go is outside. Outside cats are not only harmful to wildlife, but they cause problems for the people living in the same area. Cats that are unaltered tend to dig up gardens, yowl and cry- especially during mating seasons- loudly at night, and get into fights that can be loud and leave the cats harmed after. Studies confirm that once TNR stops reproduction, and therefore mating behaviors, the cats' relationship with residents improves. Colonies become quieter as behaviors like yowling or fighting stop, calls to authorities about the cats decrease significantly, and community morale improves (Haller, 2002). With all of this in mind, it can be concluded that cat populations create a large and complicated issue.

Project Description

Vanderburgh Humane Society is seeking to implement a Trap, Neuter, Release (TNR) program at the shelter. This program would be run by both volunteers as well as medical professionals that will carry out the surgeries on Monday, Wednesday, and Friday mornings between the times of 8 am and 10 am. For this time slot, no appointment is necessary. If there is a large number of cats being brought in or a different time needs to be planned for, appointments are available.

All cats that are brought in for the program will receive their spay or neuter as well as a rabies vaccine. In addition to this, the left ear of the cat will be tipped in order to identify which cats have been altered. Ear-tipping is the universally accepted way to tell whether a feral cat has been neutered or spayed. The procedure involves removing the distal one-quarter of their left ear while they are under anesthesia during their spay or neuter. It is not painful to the cat and the ear heals up quickly. This is important to the program in order to avoid cats that have already been through the TNR process accidentally coming in again. The cat will then be held at the shelter until it is well enough to be returned, this is estimated at one full day, and can then be picked up the next morning starting at 8 am.

The community member or volunteer will then release the cat back to its original location. This process is designed to be run smoothly and quickly so as to alter as many

community cats as possible. Additionally, the program requires little of the community members so as not to deter anyone from participating. All that is required of the community member bringing feral cats in is pick up and drop off as well as informing the shelter where the cat was located for data purposes.

VHS will run this program for the full grant period. Upon measuring its success, VHS is hopeful that this program can become a permanent fixture at the shelter.

Justification for Specific Strategies or Interventions

The most effective approach that can be taken to control cat populations is through trap, neuter, release programs. TNR has been implemented in many different locations and has shown time and time again that it can make a big impact on community programs. Specific examples of this can be seen at the University of Florida where after an eleven-year time span the campus saw a 66% decrease on campus as well as no new kittens being born into the colony after only four years (Levy, 2003). Additionally, A TNR program at Texas A&M University neutered 123 cats in its first year and found no new litters of kittens the following year (Hughes, 2002). These are just two examples of many where TNR has had a dramatic impact on the community populations. Many people wonder why cats cannot just be relocated from areas as it seems like it would be much easier, but it has been found that often when colonies are relocated, new cats move into the territory through a phenomenon known as the vacuum effect. What this means is that whenever cats are removed, new cats move in, or the surviving cats left behind breed to capacity, making the relocation pointless. Some people ask to just have feral cats euthanized, but the vacuum effect comes into play here as well, not to mention that this tactic is often met with a great deal of community backlash. TNR is the only humane, effective method in controlling feral cat colonies.

In addition to this, it is important to make the program as easy as possible for community members in order to get them involved. The shelter will see more feral intakes by offering free procedures for ferals in Evansville and this will make Vanderburgh Humane Society's goal more achievable. To cover costs in the future, VHS will hold community fundraisers. The success of these will be evaluated, and if need be VHS will ask TNR participants to make a small donation.

Finally, Vanderburgh Humane Society feels that it is crucial to get to the root of the feral cat problem to stop it at its source: humans. Jörg Aurich and Anja Becher identified pet owners as the reason for overpopulation in cats in their article "Educating owners – the Key to Managing Cat Populations" for "Veterinary Record". Often, feral cat populations are established by either abandoned pets, a pet that has gotten loose, or a cat that has been allowed to roam outside that has not been altered. This is why part of our TNR program will be dedicated to the education of the public in order to help owners understand why getting a pet altered is so important. In order to do this VHS, will be setting up an additional website located on the main website, creating infographics to be shared on social media, and hosting educational programs and talks through the shelter.

Objectives and Evaluation

With this program, Vanderburgh Humane Society's largest goal is to spay and neuter feral cats in order to control the rising population. Through the implementation of a TNR program, we can aim to have 75% of the feral cat population sterilized within the span of ten years. This is a long-term goal, but there are shorter, measurable successes that can be viewed within the first one or two years. Vanderburgh Humane Society hopes to alter a minimum of 123 cats within the first year, and just this will have a noticeable effect on reducing feral cat populations in the community.

Initially, Vanderburgh Humane Society will need to make an estimate of feral cat numbers in order to record trends and ensure that the program is in line with the set goals. To do this, we can do a sampling of areas that community members have labeled as high population locations. From then on, in addition to keeping a record of the number of cats altered through the program, VHS can also keep an eye on these feral populations to ensure that the program is working as it should. New samples of these areas will be collected once every two years. On a more regular basis, the shelter will keep records of every cat brought into the shelter for TNR so that we may keep more exact numbers to measure our progress. Additionally, at the time of drop off the staff member working will ask the community member bringing a feral in the location of where the cat has been taken from and records this data.

From the sterilization of feral cats, we hope to see a return of natural inhabitants of the area including birds and rodents within a span of 15 years. In addition to these, Vanderburgh Humane Society sees it necessary to get to the root of the problem and focus on education so that the community understands why it is first and foremost crucial to have pets altered, but also to understand why TNR is necessary. This will be tackled a few different ways including through the implementation of a website that can be accessed through the main Vanderburgh Humane Society website, social media posts with resources and information, and community programs that the shelter will offer throughout the years. Additionally, River Kitty Cat Cafe, owned by VHS and operated in downtown Evansville, will also share information through its social media outlets. River Kitty Cat Cafe will provide information and resources in-shop so that incoming traffic will be able to gain knowledge of the program.

Research References

- Aurich, J., & Becher, A. (2013). Educating owners - the key to managing cat populations. *Veterinary Record*, 172(22), 576-577. doi:10.1136/vr.f3294
- Hughes, K. L., & Slater, M. R. (2002). Implementation of a feral cat management program on a university campus. *Journal of Applied Animal Welfare Science*, 5(1), 15-28. doi:10.1207/s15327604jaws0501_2
- Hughes, K. L., Slater, M. R., & Haller, L. (2002). The effects of implementing a feral Cat Spay/Neuter program in a Florida COUNTY animal control service. *Journal of Applied Animal Welfare Science*, 5(4), 285-298. doi:10.1207/s15327604jaws0504_03
- Joan Meiners, N. (2018, July 03). Booming feral cat populations are a DISASTER, science says. here are 15 reasons why. Retrieved April 12, 2021, from https://www.nola.com/archive/article_eb5c5aae-d596-552f-995d-6dfbe87ce68f.html
- Levy, J. K., Gale, D. W., & Gale, L. A. (2003). Evaluation of the effect of a long-term trap-neuter-return and adoption program on a free-roaming cat population. *Journal of the American Veterinary Medical Association*, 222(1), 42-46.
- Little, S. E. (2012). Female reproduction. *The Cat*, 1195-1227. doi:10.1016/b978-1-4377-0660-4.00040-5
- Mott, M. (2021, February 10). U.S. faces GROWING feral Cat problem. Retrieved April 12, 2021, from <https://www.nationalgeographic.com/animals/article/feral-cat-problem>
- Pet statistics. (n.d.). Retrieved April 12, 2021, from <https://www.asPCA.org/animal-homelessness/shelter-intake-and-surrender/pet-statistics>doi :10.2460/javma.2003.222.42

Budget

Item	Quantity	Cost	Total
Vet	1	\$39.71/hr (9 hours per week)	\$18,584/yr
Animal Coordinator	1	\$15/hr	\$6,026/yr
Surgery table and light	1	\$2,389	\$2,389
Cages (units)	5	\$160	\$800
Carriers/traps	12	\$35	\$420
Miscellaneous drugs including anesthesia*, analgesics, antibiotics, and vaccines			\$460
Cleaning equipment			\$210
Instrument trays and stand	2	\$79	\$158
Suture material			\$210
Drapes, gowns, and gloves			\$130
Total Budget			\$29,387
Total Grant Request			\$29,387

Itemized Budget Justification

Vet- The shelter will need someone who is knowledgeable and qualified to carry out the surgery involved in TNR. The vet would be needed for roughly three hours a day, three days a week for this program.

Animal Coordinator- Animal coordinators are responsible for maintaining records of feral cats. This is important to this program as it is what will measure the success of TNR.

Surgery table and light/ Miscellaneous drugs including anesthesia*, analgesics, antibiotics, and vaccines/ Cleaning equipment/ Instrument trays and stand/ Suture material/ Suture material/

Drapes, gowns, and gloves- These are all requirements to carry out a safe and sanitary medical procedure

Cages- the cats will need to be placed in a cage before and after and the surgery

Carriers/traps: feral cats will need to be caught first in order to be brought in for a spay/neuter.

The shelter will offer these to the public for rent so that community members can catch the cat(s) and bring them to the shelter.

Timeline

September 2021: Reach out to community members inquiring about large feral cat locations.

Begin sampling these areas to create a baseline for data.

October 2021: set up a webpage on the Vanderburgh Humane Society website in order to give information about the program to community members. Set up a Facebook page to share updates and information. This will be run by our animal coordinator.

November 2021: Begin accepting TNR intakes

November 2021- September 2022: Perform spay/neuter and record data of all intakes.

March 2022: Have the first workshop/ educational program for community members at the shelter as well as River Kitty Cat Cafe to educate them about spay and neuter/TNR. This timing was chosen as it is the start of “kitten season”, a period of time in which cats begin breeding/producing offspring, and neighborhoods, as well as shelters, fill with new kittens.

September 2022: End of the first year of Vanderburgh Humane Society’s TNR program. Review data that has been collected. This information can be shared through social media and the VHS website so that the public can see the progress made.