FERAL CAT COLONY LOCATION IDENTIFICATION IN LAWRENCE, KANSAS

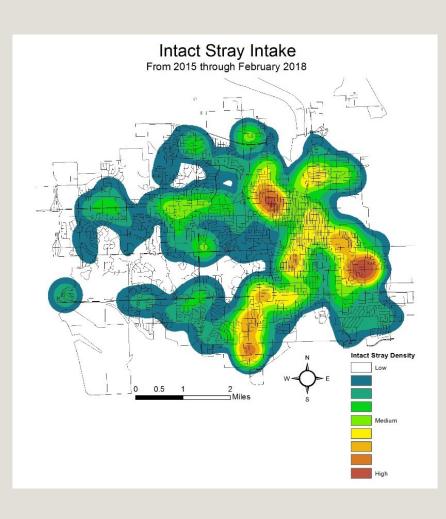
What is Trap-Neuter-Return (TNR)

- TNR is the act of trapping free-roaming cats, sterilizing them, and returning them to the field.
- Once a cat has been fixed, their ear is tipped to let colony caretakers and future trappers know a cat has already been spayed or neutered.
- Feral cats are cats that are born in the wild or abandoned cats that have reverted back to their wild ways.
- These cats generally do not do well in shelters and are often not able to be socialized. Therefore, they have a high chance of being euthanized. Especially in communities that do not have TNR programs.

https://www.aspca.org/animal-homelessness/shelter-intake-and-surrender/closer-look-community-cats

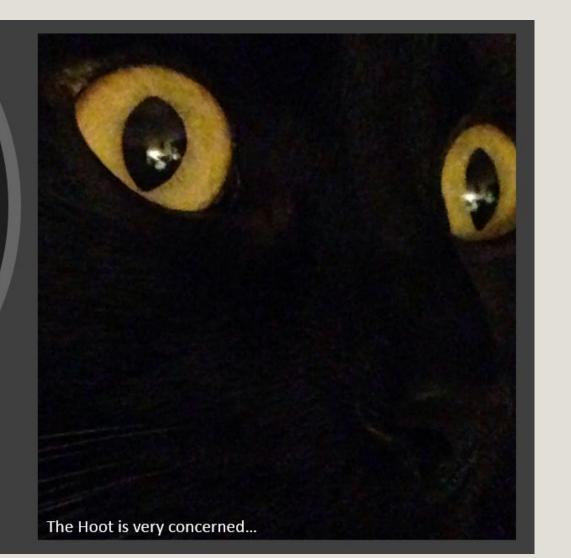


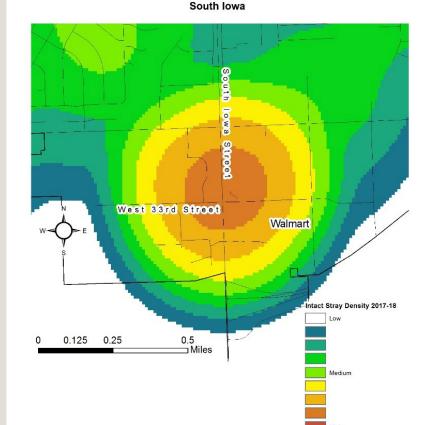
The analysis yielded four areas of interest for implementing a trap-neuter-return program. These areas are: 19th Street and Harper Street in East Lawrence, Veteran's Park located at 19th Street and Louisiana, South Iowa at 33rd and Iowa Street, and 5th Street and Wisconsin Street near Lawrence Memorial Hospital. Veteran's Park is also an area of interest in regards to having clusters of cats that SNAP tested positive for FIV/Feline Leukemia. North Lawrence is the second location showing clusters of diseased cats. These areas can be better managed by vaccinating the cats that are trapped from these locations.



The Problem

- Lawrence, Kansas currently has no program in place to sterilize community cats.
- According to the Director of the Lawrence Humane Society, the act of "Returning" in TNR is considered abandonment, placing TNR in a policy gray area. However, public opinion is changing about TNR and it is widely felt that TNR will soon be "legal" within the city.
- The goal is to identify that areas of greatest need for TNR.





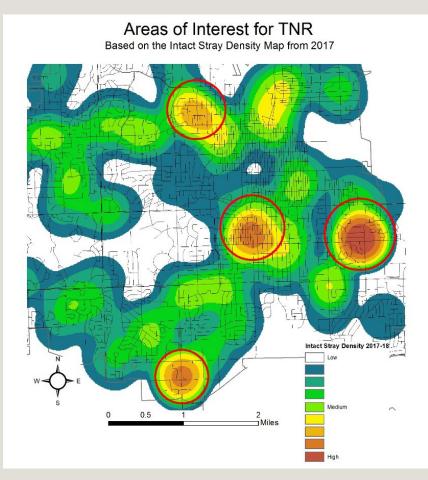
Methods Intake data from July of 2014 to February of 2018 was given with permission by the Lawrence Humane Society and the City of Lawrence Felines were separated by intake type to isolate the stray cat population (3,170) cats. Strays were further separated by their altered status: 2,136 altered stray cats 678 intact stray cats – intact/unaltered cats are my target demographic as they are more likely to be feral cats residing in colonies. Lastly, all strays were separated by positive snap test results. 18 positive of 39 tested intact cats (46% positivity rate) 10 positive of 1011 tested altered cats (1% positivity rate) A composite address locator tool using center roadline and address point data of the city of Lawrence was used to geocode each cat Of the 3,170 strays, the data was "clean" on 2,811 of the cats which is an 89% clean data rate.

Point density tool was used in the spatial analyst toolbox to create heat maps displaying areas of intact stray intake density.

Natural break classification

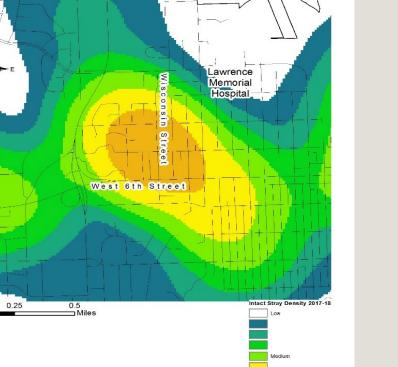
Results and Conclusion





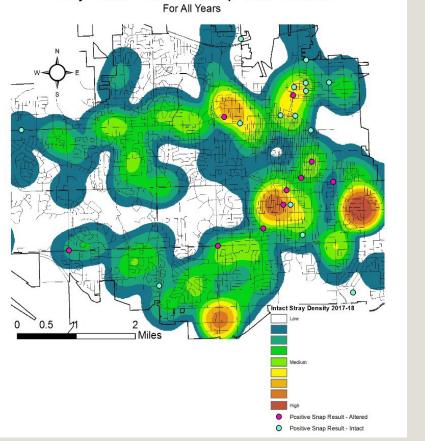
Area of Interest #4

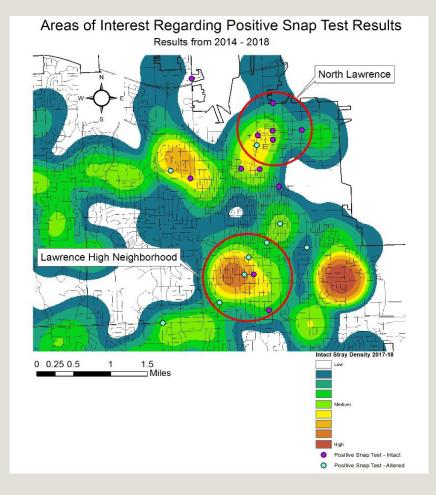
Neighborhood Adjacent to Lawrence Memorial Hospita



West 0.125 0.25

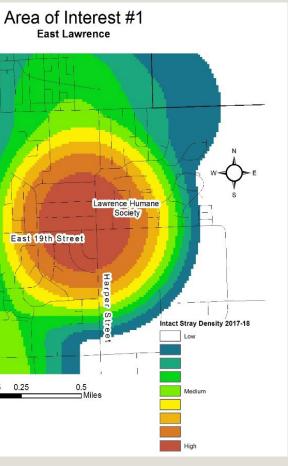
City Wide Positive Snap Test Results





Sources

The Lawrence Humane Society, the City of Lawrence GIS Department, and Douglas County GIS all graciously agreed to allow their data to be used for this project. ASPCAPro.org has a variety of resources on how recreate similar projects to this one. These resources include articles and videos. The ASPCA Pro website has proved invaluable throughout the duration of this process and was the inspiration for this project.



Area of Interest #2 South of Campus - Veteran's Park

