# TNR SECONDARY RESEARCH

# **CAT REPRODUCTION**

#### **FIX HOUSTON**

https://friends4life.org/programs-and-events/fix-houston/92% of kittens in the U.S. are born to free-roaming cats.

#### **AVMA**

https://avmajournals.avma.org/doi/abs/10.2460/javma.2004.225.1399

- Pregnancy highest in March, April, and May.
- Cats produced a mean of 1.4 litters/y, with a median of 3 kittens/litter (range, 1 to 6).
- Overall, 127 of 169 (75%) kittens died or disappeared before 6 months of age. Trauma was the most common cause of death.

#### **HAVAHART**

https://www.havahart.com/articles/benefits-tnr-programs-euthanasia?fbclid=IwAROrSqwXFY\_d73pgBxfvU55aDvFuvuZ7diPpivZ\_eVLndYb-AJLJCETM9Ps

One female cat has the ability to produce roughly 100 kittens in seven years. This high rate of reproduction among feral cats is why feral cats account for 80% of the cats that barrage animal shelters.

#### **HUMANE SOCIETY**

https://www.humanesociety.org/resources/pets-numbers

- Estimated number of community cats in the U.S.: 30 to 40 million
- Percentage of community cats who are spayed/neutered: 2%
- Percentage of new kittens born each year produced by community cats: 80%
- Percentage of people who believe leaving a community cat outdoors is preferable to having him or her caught and euthanized: 81%
- Percentage of people providing food for community cats: 10 to 12%

### TNR EFFECTIVENESS

### **ALLEY CAT ALLIES**

https://www.alleycat.org/resources/trap-neuter-return-research-compendium/

### **FRONTIERS**

https://www.frontiersin.org/articles/10.3389/fvets.2019.00238/full

### **ASPCA**

https://www.aspcapro.org/news/2019/07/25/new-study-high-intensity-tnr-could-mean-over-30-times-fewer-cat-deaths

Summary points from the frontiers research link.

Using sophisticated modeling software to simulate the impacts and associated costs of seven different management strategies on reducing cat populations, the study's key findings include:

- TNR can be effective for reducing preventable deaths. When performed effectively, TNR can reduce preventable deaths drastically while also reducing population size.
- Intensity matters. The ability of TNR to reduce preventable deaths and population size largely disappears when implemented at lower levels (sterilizing 25% of cats every six months, as compared to 75%).
- Kitten mortality deserves more attention. Kitten deaths comprise a large majority of preventable deaths under all management scenarios, including removal where trapped cats are euthanized.
- Reducing abandonment is important. More than with any other option, TNR outcomes (especially population size reduction) can be improved by efforts to reduce abandonment and adopt out friendly cats.
- Comparing approaches. Culling (waiting until populations reach a certain level before removing and euthanizing cats) is likely to be ineffective for population management regardless of intensity, while the effectiveness of regular removal (a certain percentage of cats removed every six months) varies with intensity.

"This research confirms that high-intensity TNR is the most effective, humane way to stabilize a population of community cats and, over time, reduce them."

Margaret Slater, DVM, PhD, ASPCA Senior Director of Research

#### **HAVAHART**

https://www.havahart.com/articles/benefits-tnr-programs-euthanasia?fbclid=IwAROrSqwXFY\_d73pgBxfyU55aDvFuyuZ7diPpjvZ\_eVLndYb-AJLJCETM9Ps

TNR costs roughly \$50-\$60 for the entire process, while it generally costs roughly \$100-\$105 to euthanize a cat. There are even a few TNR programs throughout the U.S. that cover the full cost for TNR, making the expense for the individual trapping the cat \$0.

## **BEST FRIENDS ANIMAL SOCIETY**

https://resources.bestfriends.org/article/trap-neuter-return-tnr-success-stories

List of published case studies and programs

### CAT EUTHANIZATION RATES

# **ASPCA**

https://www.aspca.org/animal-homelessness/shelter-intake-and-surrender/pet-statistics

Each year, about 1.5 million shelter animals are euthanized (670,000 dogs and 860,000 cats) and around 3.2 million shelter animals are adopted.

#### **HUMANE SOCIETY**

https://www.humanesociety.org/resources/pets-numbers

- Percentage of cats euthanized in shelters: 70%
- Percentage of total shelter intake comprised of cats: Approximately 50% (but in some regions 2/3 of shelter population is cats)

# THE VACUUM EFFECT

### **ALLEY CAT ALLIES**

https://www.alleycat.org/resources/the-vacuum-effect-why-catch-and-kill-doesnt-work/https://www.alleycat.org/resources/research-the-vacuum-effect/

- If cats are removed from their outdoor home, it creates a territorial opening—or vacuum—that will not remain empty.
- Removing cats from an area may cause a temporary decrease in the cat population, but more cats WILL take their place—and it won't take long.
- The Vacuum Effect has been observed in many species, not just cats.
- Catching and removing (or killing) cats is therefore futile. It is an expensive, deadly cycle which yields no long-term benefits.
- Trap-Neuter-Return (TNR) is the only way to stabilize cat populations. It is the humane, effective approach to community cats and is sound public policy.

### ANIMAL ADVOCACY

http://www.animaladvocacy.ie/tnr/scientific-evidence/the-vacuum-effect/

The vacuum effect is a phenomenon scientifically recognized worldwide, across all types of animal species. Cities and shelters across the world have experienced great success with Trap Neuter Return - it is now official policy for feral cats in Washington, DC, Baltimore, and Chicago.