Introduction and Research Goals

We used passively collected data from the Guelph Humane Society to determine the effects of the Capacity for Care program on cat admissions and risk factors associated with time-to-adoption, from 2011 to 2016. Results from the Capacity for Care pilot study were released in 2015 by the Canadian Federation of Humane Societies; however, we strongly believe that long-term data is required to gain a deeper understanding of the effects of the program. Various studies have looked at risk factors associated with a cat’s time-to-adoption (Kogan, 2013; Brown, 2014; Zito, 2015); however, it is important for communities to determine their community-specific risk factors in order to create strategies to expedite the adoption process and improve animal welfare in their community. By studying cat admissions and time-to-adoption data at the Guelph Humane Society, our goal was to determine:

- What trends and seasonal patterns were seen in cat admissions?
- What risk factors were associated with likelihood of adoption and average time-to-adoption?
- What effect did the Capacity for Care program have on cat admissions and time-to-adoption?

Background

This research study was based on a pilot study run by the Canadian Federation of Humane Societies at the Guelph Humane Society in August 2014. Many shelters throughout Canada and the United States have implemented the Capacity for Care program; however, there is a lack of scientific evidence displaying the effects of the program, as previous reports have only included descriptive statistics (CFHS, 2015). This study focuses on examining characteristics of cats that have been previously identified as risk factors that affect time-to-adoption of cats in an animal shelter. Although behavioral characteristics of cats have been found to affect time-to-adoption (Fanuzzi, 2010; Weiss, 2012; Dybdall and Brasser, 2014), our study was limited to data that was routinely collected at the Guelph Humane Society and therefore focuses on physical characteristics of cats. Given the push towards improved animal welfare and reduced euthanasia, we were interested in gaining more insight into a program designed to help achieve these goals.

Methods

We designed a retrospective study using data to explore the effects of the Capacity for Care program on cat admissions and risk factors associated with time-to-adoption of cats at the Guelph Humane Society. Using time series analysis, we were able to explore trends and seasonal patterns before and after the Capacity for Care, in order to better evaluate the effect on admissions. Our study also looked at time-to-adoption using survival analysis to determine the effect of certain risk factors on a cat’s likelihood of being adopted, in addition to the effect of the Capacity for Care program on time-to-adoption of cats at the Guelph Humane Society. The risk factors we were able to evaluate in this study include age, sex, neuter status, breed and coat colour, and admission source.

Findings

The Guelph Humane Society is the City of Guelph’s local animal shelter, taking in approximately 3000 animals per year. Currently located at 500 Wellington Street West in Guelph, Ontario, the Guelph Humane Society has an excellent working relationship with local, provincial, and national animal welfare organizations. In August 2014, the Guelph Humane Society implemented the Capacity for Care program at its shelter. The Capacity for Care program is a shelter population management model that helps shelters achieve their goals of improving the overall welfare of animals in their care and ensures that the Five Freedoms of animal welfare are met.

Key findings from time series analysis:

- Total live cat admissions to the Guelph Humane Society decreased on average 16% per year from January 2011 to December 2015.
- A decrease of 24% was seen in adult cat admissions (older than 6 months) after the implementation of the Capacity for Care program.
- Significant seasonal patterns were seen in kitten admissions (6 months or younger), with only one major seasonal peak identified each year.

Key findings from survival analysis:

- Cats were 24% more likely to be adopted after the implementation of the Capacity for Care program.
- Males were 20% more likely to be adopted than females.
- Exotic breeds were 64% more likely to be adopted than Domestic Shorthairs.
- Domestic Mediumhairs and Domestic Longhairs were 19% more likely to be adopted than Domestic Shorthairs.
- Adult cats greater than six months of age were 13% more likely to be adopted than kittens six months of age or younger.
- Stray cats were found to take an average of 6 days longer to be adopted when compared to owner/guardian surrendered cats.
- Spayed cats were found to take an average of 7 days longer to be adopted when compared to neutered cats.
- Black cats were found to take an average of 6 days longer to be adopted compared to other coat colours; however, this finding was not statistically significant.

Conclusions

- This study was the first to evaluate the effects of the Capacity for Care program on cat admissions and time-to-adoption using analytical statistics and long-term data.
- There was a downward trend in cat admissions, but no intervention effect was found on admissions of all live cats.
- Time series analysis based on age categories found a significant decrease in adult cat admissions into the Guelph Humane Society after the implementation of the Capacity for Care program.
- Strong seasonality was seen in kittens each year, typically associated with ‘kitten season’. Only one major peak was identified, suggesting that the majority of unaltered females are only having one litter per year, otherwise a second peak should be seen.
- The Capacity for Care program was found to be associated with a decrease in adult cat admissions and a decreased time-to-adoption of cats at the Guelph Humane Society.
- Risk factors found to be associated with time-to-adoption include breed, sex, and age. Characteristics of cats with the longest time-to-adoption include being a domestic shorthair, female, kitten, admitted prior to the Capacity for Care program. Characteristics of cats with the shortest time-to-adoption include being an exotic male, adult cat, adopted after the Capacity for Care program.

References


Limitations

Due to the year that the Capacity for Care program was implemented, there were variables that could have affected the outdoor cat population in the City of Guelph, and could consequently affect the cat admissions into the Guelph Humane Society. These variables include increased predator-prey interactions (coyotes), harsh weather conditions, and a change in garbage disposal system. Our results showed that adult cats were more likely to be adopted and had a shorter time-to-adoption than kittens. We believe this is a result of the kittens’ wearing time being included in the data. We also found that neutered cats were more likely to be adopted and had a shorter time-to-adoption. One hypothesis regarding this finding is that the difference seen between these two groups is due to the time it takes for the intact cats to be neutered before they can be adopted, as it is a requirement that all animals adopted from the Guelph Humane Society are neutered.

Researchers

Natalasha Janke (njanke@uoguelph.ca)
Dr. Olaf Birke (obirke@uoguelph.ca)