

Bristol Cats Study Newsletter

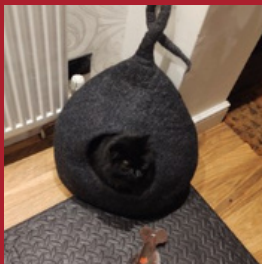
Summer 2023

The 'Bristol Cats' study is a pioneering study of cat health, welfare and behaviour run by vets, behaviourists and epidemiologists at the University of Bristol. The aim is to improve knowledge of common diseases and behaviour problems of cats, for example, overgrooming, aggressive behaviour, obesity and diabetes mellitus. Findings from the study may be used by veterinary practitioners, cat breeders, owners and the cat community to improve the health and welfare of cats in the future.

Corkscrew cat cave winner

Congratulations to Liquorice from Hemel Hempsted, who was the winner of the corkscrew cat cave in our recent prize draw.

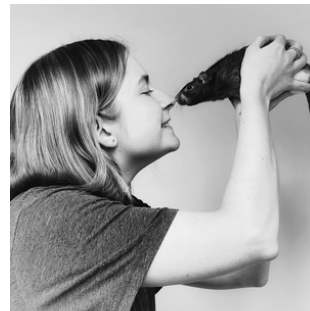
We hope you are enjoying snuggling up in your new den Liquorice!



Study news

We are busier than ever here in the Bristol Cats office, with new projects looking at the effect of age of neutering on subsequent health and behaviour, characterising the pet cat gut microbiome and looking at how often our cats visit the vets and for what reasons.

Welcome Caitlin and Euan to the team



Caitlin Walburn is joining the team for three months over the Summer. She will be inputting the data from the questionnaires completed by post, helping with the website redesign and carrying out general administration tasks. Caitlin is passionate about animal welfare and is currently looking at pet rat welfare for her PhD.

The Bristol Cats steering group has also recently welcomed Dr Euan Bennet, Lecturer in Research and Numerical Skills (Veterinary Science & Education). Euan is leading a structural data transformation project which will combine all of the datasets from each of the owner questionnaires and reconcile these with the cat's clinical veterinary records.



This will allow researchers to analyse the data as a single, multiyear dataset, thereby unlocking the potential of the longitudinal data. We anticipate that this will lead to new insights into cat health, behaviour and welfare and impact through public and professional education.

ISFM Congress 2023

MSc student Aimee Taylor recently presented her poster at the International Society for Feline Medicine congress in Dublin. The ISFM Congress is an opportunity for veterinary surgeons and nurses to participate in gold standard feline learning <https://icatcare.org/events/isfmcongress/>. Aimee has been looking at mortality rates in young cats (from kittens to 8 years of age) using data from Bristol Cats and you can see what she has been working on in more detail in her poster on the next page.

We hope you are enjoying the recent warm weather and you are managing to stay cool and hydrated.



Miffy is showing us all how it's done by drinking from the bird bath in the garden. Thanks Miffy!

Website revamp!

We are currently in the process of updating our website and we'd love to hear your thoughts on how we can improve things. What would you like to see on our new pages? Please get in touch at: cat-study@bristol.ac.uk



A first look at mortality in a young cohort of domestic pet cats

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Bristol Cats

INTRODUCTION

The Bristol Cats Study (BCS) is a unique, longitudinal study, following a cohort of domestic cats in the United Kingdom throughout their lifetime. Owners complete regular questionnaires regarding various aspects of their cat's life which contribute to prospectively collected data. All-cause mortality data represent an important resource which can be utilised to improve population health, welfare, and longevity. Previously, this type of data were extrapolated from veterinary records and represented cats attending veterinary clinics only. Here, we explore causes of death recounted by cat owners, hence including a previously unreported subset of the feline population.

MATERIALS AND METHODS

Data were collated from the first ten questionnaires of the BCS, pertaining to the first eight years of the cat's life. Cats that had died were identified and the causes categorised based primarily on the questionnaire information provided by the owners; in ambiguous cases the medical records were reviewed for clarification. The categories used were guided by a previous study¹. Descriptive statistics were used to summarise the causes of mortality for all the cats and then by kitten (less than one year old) and young adult (one to six years old) life stages as defined by the American Association of Feline Practitioners (AAFP).

RESULTS

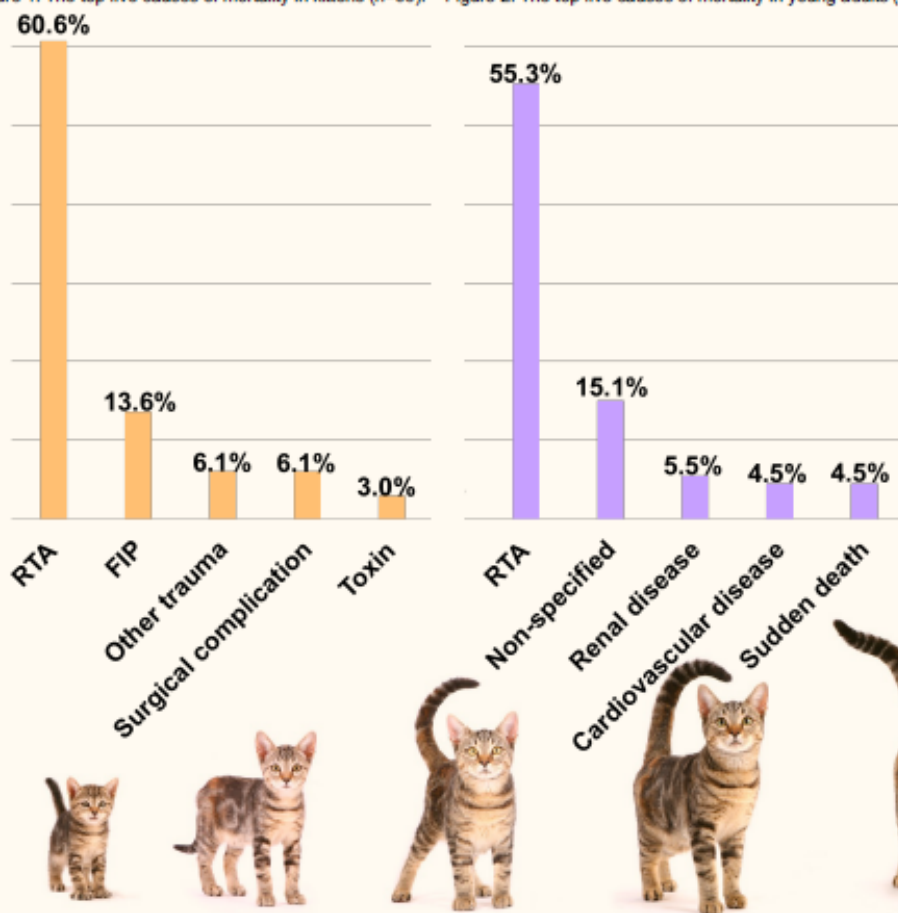
ALL CATS

Table 1: Mortality classification for all the cats included in the study (n=362; up to eight years old).

Mortality cause	Cases	%
Road Traffic Accident (RTA)	165	45.6
Non-specified	48	13.3
Renal disease	24	6.6
Cardiovascular disease	23	6.4
Neoplasia	22	6.1
Sudden death	17	4.7
FIP	14	3.9
Other trauma	14	3.9
Neurological disorder	10	2.8
Surgical complication	5	1.4
Hepatopathy	4	1.1
Respiratory disease	4	1.1
Gastrointestinal disease	3	0.8
Toxin	3	0.8
IMHA	2	0.6
Urinary disorder	2	0.6
Behavioural condition	1	0.3
Endocrine disorder	1	0.3

KITTENS & YOUNG ADULTS

Figure 1: The top five causes of mortality in kittens (n=66). Figure 2: The top five causes of mortality in young adults (n=199).



CONCLUSIONS

Road traffic accidents represent the most frequent cause of death for all cats up to eight years old, for kittens and young adults. Kittens are more likely to succumb to age-related infectious disease, trauma and accidents, whereas young adult cats can be affected by organ-specific diseases. This study identified important differences in causes of mortality for different life stages in a population of cats that may not be accounted for in medical records.

LIMITATIONS

- Data relies partly on owner recollection which may be inconsistent when compared to medical records.
- Medical records were not available for all cats and were not always complete.
- Some mortality causes could not be categorised by system, disease or event (e.g., non-specified).
- Study currently limited to the earlier life stages with further analysis required as this cohort of cats age.

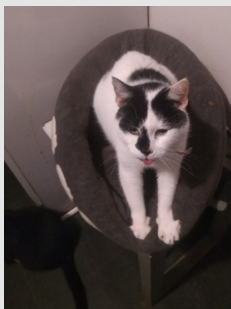


2023 Prize Draw Winners!

In January we notified the winners of £100, £50 and £30 shopping vouchers in our annual prize draw.

Prizes were awarded to randomly selected owners who had returned a completed questionnaire in the last 12 months. Here are some of our lucky winners;

Boz



Lola



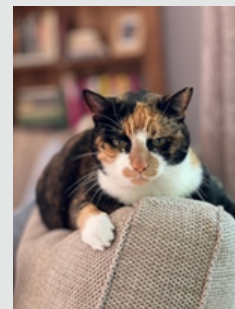
Luka



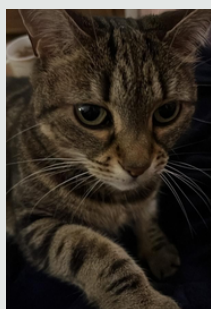
Tyrion



Rover



Molly



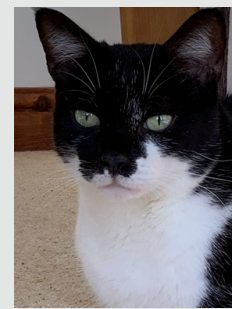
SuziQ



Mo



Fife



Take your cats to the vet campaign



Alex Jemmet, senior research scientist at Waltham Petcare Science Institute, has been looking

at how often and why our Bristol Cats visit their vet. The findings are being used to inform the Royal Canin 'Take your cat to the vets' campaign, launched on 8th August, which highlights the importance of taking your cat to the vet when you notice differences in their normal behaviour, for example if you notice your cat drinking more often. Alex found that 2184 Bristol Cats (92.7%) received veterinary treatment at least once between kittenhood and 8 years old, and 511 study participants (21.7%) reported visiting a vet for specific treatment each year, with around 85% visiting the vets every year for their vaccinations and a check up.

Thanks to everyone who helped with the Quality of Life project



The Quality of Life Project is a research collaboration with Waltham Petcare Science Institute. The aim of the project is to develop a questionnaire tool to assess different aspects of the wellbeing of cats, that is easy to complete and provides immediate feedback to the owner. A group of 678 of our Bristol Cat owners who showed interest in being involved in other research projects, were asked to complete a short questionnaire. This questionnaire contained questions relating to the cat's age, sex, neuter status, breed, environment, feeding, health and behaviour. This information will be used to develop a tool to measure the quality of life of pet cats. Once developed and validated, the questionnaire will be made publicly available.

A publication is currently being prepared so follow our social media channels for an announcement when it is released!



Stay up to date with us on Twitter (@UniofBristolCat), or Facebook (www.facebook.com/bristolcats.study) Full details of the research described can be accessed via the study website: www.bristol.ac.uk/vetscience/cats)



Do owner-reported changes in mobility reflect measures of activity, pain and degenerative joint disease in cats?

Feline degenerative joint disease (DJD) is a common cause of chronic pain in cats and is strongly associated with age. DJD has been estimated to occur in 61% to 99% of cats of all ages.

Evelyn Maniaki, the Zoetis Feline Scholar, recruited 57 owners through Bristol Cats and the general public for her MSc research project. The study aimed to determine if early signs of DJD in cats can be detected through owner-reported mobility changes and if these changes affect the cats' quality of life.

The study used owner assessment questionnaires (namely the Functional Mobility Pain Index), orthopaedic examination, and accelerometry (a wearable device on the cat's collar) to gather data on cats with early DJD-related mobility changes and compared it to data from healthy cats. The study found that the Functional Mobility Pain Index (FMPI) was able to differentiate between healthy cats and cats with early DJD, suggesting it can be used for timely diagnosis.

Overall, the study highlights the importance of recognising early signs of DJD in cats for implementing interventions to slow its progression and improve the cats' quality of life. The FMPI and orthopaedic examination can be used in the veterinary clinic to differentiate cats with early DJD-related pain from healthy cats. You can access the full study paper here:
<https://journals.sagepub.com/doi/full/10.1177/1098612X231178765>



Thank you for your help – the Bristol Cat owners and cats are helping to make a difference to our knowledge of factors affecting feline welfare. We would also like to thank WALTHAM® Petcare Science Institute and Cats Protection for funding the study.



Prevalence and risk factors for common respiratory pathogens within a cohort of pet cats in the UK

Iris Chan, a veterinary resident at Bristol Veterinary School, examined three common viruses that can cause respiratory infections in cats called feline herpesvirus (FHV), feline calicivirus (FCV), and Chlamydia felis. Even though there are vaccines available to protect against them, they are still a factor in many diseases in cats. Currently, the best way to detect them is by using a technique called PCR to analyze genetic material obtained from swabs taken from the cat's mouth.

Iris and the team found that all three viruses were present in the cats they studied, but the prevalence (how many cats had the virus) was lower than in previous studies. This is thought to be because the cats in the study were mostly young pets, while previous studies included older cats or cats from breeding and rescue facilities. Overall, this study showed that FCV was the most common virus in the cats they studied, especially in purebred cats and those with respiratory symptoms. The findings highlight the importance of using disinfectants that are effective against FCV, especially when treating cats with respiratory infections. Further studies with more cats and sequential samples could help us understand the risk factors for these viruses better. You can access the full study paper here:

<https://onlinelibrary.wiley.com/doi/10.1111/jsap.13623>



Moving house / changed your email address / need to contact us?

If you have changed email address, moved house or have a new contact number it is easy to update these online by visiting the website and following the instructions:

<https://smvsfa.onlinesurveys.ac.uk/update>

Alternatively you can get in touch using our contact details below:

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