

CP/Clinic

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Testing for retroviral infections

Shelter medicine

CP's The Welfare Guide

Shelter medicine

Feline shelter medicine principles for the GP vet

Anthrozoology

Animal hoarding and associated issues

Feline Welfare is at the heart of CP's work – find out more about *The Welfare Guide* on page 8

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Meet the team

Jenni McDonald, BSc MSc PhD

How long have you worked for CP? Seven months.

What did you do before working for CP? I was a scientific researcher at University of Exeter fascinated by research questions from ecology to epidemiology, but most especially anything cat-related!

What is your role within CP? Feline Epidemiologist.

What do you like most about your job? I love working on a diverse range of scientific research questions and collaborating with people from a range of backgrounds. It's a really positive place to work!

What is your most memorable CP moment?

Meeting everyone at headquarters during my first week and the realisation that I'm no longer the only crazy cat lady at work and we're all working towards a common goal to improve cat welfare — it was the best feeling!

Do you/did you have a pet/pets? I have a gorgeous FIV boy called Mac.

What are your hobbies/other interests? Aspirational answer: walks along the Cornish coast path and dunks in the sea. In reality a good film or book, crime thrillers especially.

Where is your favourite place to visit? I fell in love with the Cairngorms on a campervan tour around the UK. I'd love to go back.

If I wasn't doing this, I'd probably..... be battling to win academic funding for research projects.



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FIV and FeLV testing in rescue and rehoming organisations

Molly George explores the rationale for retroviral testing in cats

Why test? Feline leukaemia virus (FeLV) and Feline immunodeficiency virus (FIV) are both contagious retroviruses that can have huge impacts on a cat's life, both with the potential to persistently infect them. Surveys suggest that FeLV has a prevalence of 0.5-1% in healthy cats, or 5-10% in unwell cats and FIV has a prevalence of 6% in healthy cats and 19% in unwell cats (however this may be an overestimate)¹. The prevalence of FeLV has certainly reduced dramatically in recent years due to the success of vaccinating.

FeLV:

Prolonged close contact is required for FeLV to be transmitted, as it is primarily spread either by saliva or respiratory secretions. Cats can commonly become infected by allogrooming with an infected cat, or sharing food bowls. Transplacental infection, or

spread from a queen to her kittens via her milk is also possible. Once infected with FeLV, a cat can display a number of different outcomes (see Figure 1).

The above outcomes can make it hard to detect FeLV on diagnostic tests, as transiently infected cats can eliminate the virus three to 16 weeks later and latently infected cats harbour the virus in their tissues rather than in their blood, so cannot be detected².

FeLV is an important disease to diagnose and ultimately vaccinate against, as 80% of positive viraemic cats will die within three years of diagnosis¹. In pregnant queens, 80% will experience fetal and neonatal death and 20% of her surviving kittens will be infected³.

Fig 1: Outcomes following exposure to FeLV



Exposure to FeLV virus

Resists infection

Transient viraemia

Latent infection

Persistently infected

Neoplasia and especially lymphomas are extremely common findings in FeLV-positive cats, with common sites including the gastrointestinal tract, mediastinum, kidneys, spine, or eyes. It can also be multicentric and clinical signs are site-specific. Another frequently seen condition in FeLV-positive cats is anaemia, which tends to be non-regenerative and macrocytic and is due to bone marrow suppression¹. Immunosuppressed cats are more susceptible to secondary infections and this is often the presenting complaint. This flags the importance of FeLV testing in sick cats, as other diseases can be secondary to a FeLV infection.

FIV

FIV is spread via saliva introduction into tissues, usually by bite wounds. This of course indicates that there is a population of outdoor, roaming males that may be more at risk of FIV, due to their higher incidence of fighting. Queen-to-kitten transmission can occur and about one third of kittens born to an infected queen are likely to be infected, but studies suggest this more commonly occurs via milk than transplacentally¹.

Once bitten, the virus spreads from the bite wound to local lymph nodes and the thymus, where it infects T lymphocytes (in particular CD4 lymphocytes) and macrophages³. Cats are infected for life, but are usually asymptomatic for a period of years, during which they appear clinically normal. However, over time there is a decline in immune function and a subsequent inability to respond to infections, which can be reflected in the clinical signs.

Testing for FIV would be indicated and suggested in any cats with respiratory tract infections, conjunctivitis, anaemia or skin infections and especially those that don't respond well to treatment.

Acute signs include pyrexia, lymphadenopathy and diarrhoea, but chronically clinical signs are associated with immunosuppression. Secondary infections with *Chlamydomphila*, *Toxoplasma*, *Giardia*, *Malassezia*, Feline Herpes Virus (FHV), Feline Calicivirus (FCV) or even FeLV are common². It is predicted that in 30% of FIV cases an upper respiratory tract infection will be present, possibly with a secondary infection of FHV or FCV³. For this reason, testing for FIV would be indicated and suggested in any cats with respiratory tract infections, conjunctivitis, anaemia or skin infections and especially those that don't respond well to treatment.

It is difficult to determine whether an immunosuppressed cat with secondary infections and weight loss has FIV-associated immunodeficiency, FeLV-associated immunodeficiency, or both in conjunction, which stresses the need to perform blood testing for FIV and FeLV to rule either of them out.

Which cats?

Cats Protection's current minimum veterinary standards (MVS) state that domestic (non-feral) cats that are of highest risk (sick cats showing clinical signs of disease relatable to a retroviral infection) must be tested. This is something that should be considered in practice and any clinically unwell cats, where suspicion of a retroviral infection is high, must be tested⁴. FeLV would for example be suspected in an unvaccinated multi-cat household, with cats suffering from anaemia, lymphoma, immunosuppression, or panleukopenia and testing would be essential.

Cats most at risk of FIV are entire, roaming males (Fig 2), cats who engage in fighting behaviour, cats with a history of abscesses (following cat bites) and potentially kittens from a FIV-positive queen. It is estimated that one third of kittens from a FIV-positive queen will become viraemic, so testing is crucial in kittens with a known FIV-positive queen¹. Some people suggest performing FeLV/FIV testing as part of a kitten health screening, however as described later, the risk of false positives could complicate this.

Centres differ slightly in that they not only test the highest risk, sick cats, but also any high risk cats eg entire, sexually mature cats, cats in contact with FeLV-positive individuals and any cat before extensive treatment or surgery. If resources allow,

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stray cats, orphan kittens and feral cats under general anaesthesia are also suggested. If any feral cat is positive on the in-house test, they must be euthanased rather than waiting for confirmatory tests, to avoid unnecessary stress of temporary kennelling and the associated negative impact on the cat's welfare⁴.

How

Screening blood testing kits are used as an in-house first line test (see Figure 3).

In FeLV the in-house test utilises antibody to detect the FeLV p27 antigen, a core protein within the virus. A positive result could represent a:

- persistently infected cat
- transiently infected cat
- false positive

A negative test result could infer that:

- cat not exposed to FeLV
- a transiently infected cat that has eliminated the virus
- a recently infected cat where infection is not yet detectable
- a latent infection
- or a false negative²

For FeLV the Idexx SNAP FIV/FeLV Combo Test has a specificity of 98.2% and a sensitivity of 98.6%, so false positives and false negatives can occur³. In recently exposed cats with a negative SNAP test result, it is suggested to repeat the test 16 weeks later, to confirm that they definitely are negative².



Fig 2: Entire male stray - high risk group. CP recommends FeLV/FIV testing

In FIV the in-house test detects FIV antibodies against either the p24 or gp41 antigens¹. A positive result indicates that a cat is either:

- infected with FIV
- has maternally derived antibodies
- or is a false positive

In kittens with maternally derived antibodies (MDA), it is important to retest kittens once they are over six months of age if only in-house testing is available, as MDA can last until the kittens are five to six months old⁴.

A negative test result could tell us that:

- a cat has not been exposed to the FIV virus
- a cat has been infected recently and has not yet seroconverted
- a cat has a terminal, chronic FIV infection and antibodies are no longer detectable
- or a false negative²

It is predicted that 10-15% of infected cats are antibody negative, for the reasons explained above¹.

In FIV the Idexx SNAP FIV/FeLV Combo Test has a sensitivity of 93.5% and a specificity of 100%, so if a cat tests positive, it is likely to be persistently infected⁵.

With any positive results, it is crucial to confirm the results at an external laboratory, due to the possibility of false positives. Using serum instead of whole blood reduces the amount of false positives found. For FIV confirmation, Cats Protection requests a PCR at Langford Veterinary Diagnostics, Bristol



Fig 3: An example of an in-house test kit.

using an EDTA sample. For FeLV confirmation, Cats Protection sends heparin and EDTA samples to Veterinary Diagnostic Services in Glasgow for virus isolation⁴.

When?

Any sick cats coming in to Cats Protection's care must be tested as soon as possible and a positive result is taken seriously, due to the risk to other cats and the future homeability of the cat. Any cats of unknown FIV/FeLV status being rehomed to multi-cat households should be considered for FIV/FeLV testing, to minimise risk to other cats within the household.

Similarly in general veterinary practice, any sick cats with clinical signs relatable to FIV or FeLV infection must be tested as soon as possible.

Kittens must be tested when they are big enough at roughly eight to nine weeks old, however they will have maternally derived antibodies until they are five to six months old. For this reason, as described earlier, any positive FIV cats can either be retested at six months with an ELISA or in-house test or immediately with PCR, to assess how accurate this positive is⁴. FeLV pre-vaccination testing has been suggested in kittens and may in fact be useful if a kitten is from an area of high prevalence. However, due to the risk of false positives, any kittens that do identify as positives must be retested and so the benefits of pre-vaccination testing is questionable¹.

In conclusion, early recognition of clinical signs that could be linked to either FeLV or FIV is essential, in order to promptly diagnose these cats. In-house testing is a fast method of diagnosing or ruling out these retroviruses and could be an explanation for the reduction in prevalence of both FeLV and FIV in recent years. However, any positives found on in-house testing must be followed up with confirmatory tests at a suitable external laboratory.

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Figure 1: Adapted from: Sturgess K. *Notes on Feline Internal Medicine*. 2nd ed. Chichester: Blackwell Publishing; 2013.

Picture from www.cats.org.uk

Figure 2 & 3: Photos by Molly George, 9 June 2017

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2.) Hill P, Warman S, Shawcross G. *100 Top Consultations in Small Animal General Practice*. Chichester: Blackwell Publishing; 2011

3.) Barr SC, Bowman DD. *The 5-minute Veterinary Consult Clinical Companion, Canine and Feline Infectious Diseases and Parasitology*. Iowa: Blackwell Publishing; 2006

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Molly George

BVSc MRCVS



Molly is a 2018 Bristol graduate, who undertook an EMS placement with the Cats Protection in her final year of study. She has always had a passion for both feline and shelter medicine, which she hopes to pursue in her career. She is excited to start work as a new graduate at a small animal practice in South Wales.

Cats Protection's 'The Welfare Guide'

Emma Lane discusses why welfare is key in everything Cats Protection does

The Welfare Guide (WG) has been developed as part of Cats Protection's (CP) welfare strategy. It is the third guide to be written by CP, and it is the most important one yet, as it forms the basis of not only what CP does, but also explains how things are best done and why. It forms the common thread between homing, neutering, education, fundraising, advocacy and even affects pen design, shelter management and feline enrichment. Quite simply good feline welfare underpins every decision made throughout the charity. Currently, the guide is only available to CP volunteers and staff as well as to the members of the veterinary profession working with CP by providing veterinary care for cats in CP care. Future plans include making this document available to a much wider audience to improve the understanding of cats and their needs.

As the PDSA Animal Wellbeing (PAW) Report 2016 has highlighted, many pet owners are seemingly unaware of the five welfare needs of their animal companions. By using this guide, CP volunteers and staff can, through education, enhance their own knowledge on the five welfare needs. They can also spread the message to owners to ensure that their pets experience good physical and mental wellbeing in a home environment.

The principles in this guide can be used to improve cats' lives, whether in rescue care, owned or free living. A steering group made up of volunteers and staff from across the charity had input into the strategy so it could be tailored to suit the needs of CP's complex organisation. The guide is designed to help people make decisions by applying good feline welfare principles with the aim of achieving the best outcome for each specific circumstance. Each person in CP has access to the WG, across all departments

and roles, not just those working hands on with cats.

The guide includes and explains welfare definitions, such as quality of life, animal ethics, anthropomorphism, anthropocentrism to name but a few. Other sections explore topics such as cat breeding, overpopulation and neutering, wild hybrid cats, as well as cat overpopulation and stress. The application of cat welfare principles is looked at within a CP context. Human welfare within a cat welfare context is examined, highlighting topics such as compassion fatigue, the overwhelmed caregiver and considerations regarding animal hoarding. Of course, the guide cannot cover every eventuality but it aims to highlight key areas regarding cat welfare and directs people to other CP resources and reliable external information where necessary.

The main section of the WG aims to give a more in-depth understanding of the feline species as well as their species-specific welfare needs and is laid out in separate chapters as summarised below.

The guide is available to CP volunteers and staff and members of the vet profession providing care for CP cats



The cat

This chapter looks at the domestic cat and its domestication from the African wildcat. It goes into further details about understanding the basic feline needs, but also how these may differ in the companion cat and feral cat – both in the home and rescue setting. This chapter aims to highlight what makes a cat a cat, as having a greater understanding of this, ensures a solid foundation for good cat welfare.

Environment: to have a suitable place to live

It is important to consider the different environments in which cats live and address what needs to be done to ensure that each individual cat's needs are met. Different cats require different environments and meeting these needs as best as possible must be a priority. A feral cat's needs, for example, are evidently different to a socialised cat's needs. Whether in a home or housed temporarily at the vets, homing show or in rescue care, the environment should at least provide a cat's basic needs, aiming for more where possible. Cats should feel safe and secure in their environment.

Diet: to have suitable food and fresh water

This chapter explores the importance of providing suitable food and fresh water for all cats. Cats are obligate carnivores and a well-balanced diet must be derived from meat-based products and be tailored to an individual cat's needs. Obesity is one of the biggest health and welfare concerns for pet cats today. The rescue environment brings many challenges in meeting the cat's ability to engage in physical activity and hunting behaviour. Providing feeding enrichment can help mimic a cat's natural predatory feeding behaviour and also increase activity levels and provide mental stimulation. It is important to monitor and adjust the amount and type of food offered to avoid weight gain for cats in care.

Behaviour: to be able to express normal behaviour

Cats are often misunderstood and they perceive the world in a very different way to humans. Feline welfare is about what the cat experiences in each moment, physically, mentally and emotionally. They do not have a sense of the future, so it is imperative that decisions are made without human emotions clouding judgement. It is clear that cats feel happiness, relief, anxiety, fear, frustration, boredom, depression and pain. However, feelings such as jealousy, revenge, dominance or possession are not thought to be experienced by cats. For more information on the behavioural needs of cats, see CP's *The Behaviour Guide* and the soon to be launched *Understanding Cats' Needs* e-learning course on CP's national website.



Example of a pen set-up at a CP centre including the Feline Fort®

Company: to have the choice to be with or apart from other animals

Allorubbing is displayed by cats belonging to the same social group.

Health: to be protected from pain, suffering and disease

This chapter looks at the importance of protecting cats from pain, suffering, injury and disease and the effect the rescue environment has on this need. Each cat that comes into CP care receives a minimum veterinary standard (MVS) of care. This includes:

- a veterinary exam with diagnostic tests and treatments as necessary
- blood tests for feline leukemia virus (FeLV) and feline immunodeficiency virus (FIV) for all sick or high risk cats
- vaccination against
 - Feline panleukopenia (FPV)
 - Feline calicivirus (FCV)
 - Feline herpes virus (FHV)
 - FeLV
- parasite control
- neutering after first vaccination
- microchipping
- free temporary insurance

Cats are sentient animals and like humans experience pain, but unfortunately do not display their pain as openly. By understanding normal behaviour, behavioural changes associated with pain can be more readily recognised and consequently the appropriate treatment can be provided. Minimising stress is a crucial part of disease control and management, and improving a cat's mental wellbeing while in care.

By understanding normal behaviour, behavioural changes associated with pain can be more readily recognised

Affiliative behaviour such as allorubbing can be seen in cats belonging to the same social group.



Cat breeding

This chapter looks at the impact selective breeding has had on cats' characteristics, health and quality of life. Addressing the current overpopulation problem in the UK will undoubtedly improve cat welfare, particularly of the unowned population. Neutering is key to stabilising the cat population and improving health and welfare, both for the companion cat and feral cats via trap, neuter, return (TNR) programmes. There is also focus on hybrids, such as the Bengal, and the Scottish wildcat and their hybrids.

Application of cat welfare principles

Quality of life assessment tools are being developed for cats in rescue care to help determine their quality of life in care and make welfare adjustments where needed. For some cats it may not be possible to meet some or all of their basic needs and if this is the case timely interventions are needed to maintain acceptable cat welfare. Interventions can include improved management practices, cat relocation or possibly even euthanasia to prevent suffering.

Human welfare: the relationship with cat welfare

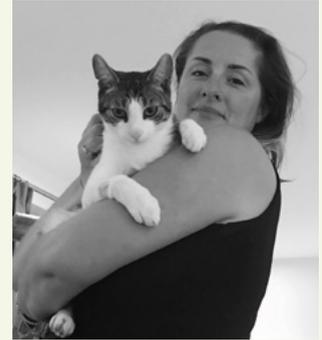
It is also very important to think about human welfare. Humans are the primary carers for cats and unfortunately changes to human welfare may have an impact on the cats they care for. Animal welfare work can be challenging, exhausting and stressful at times, and although incredibly rewarding, volunteering and working within this field can potentially have detrimental effects on the person's health and wellbeing. It is important to acknowledge that problems can exist and that anyone can be affected by stress related to working in this field. By recognising the early signs and symptoms, support and advice can be sought to avoid potential problems becoming more severe and impacting on the person's own health and the welfare of the animals they are trying to help.

If you are a veterinary practice that carries out CP work then you should have received a copy of *The Welfare Guide* in the post in November last year. Please get in touch if you've not received your copy.

Other guides (*The Veterinary Guide* and *The Behaviour Guide*) and further information are available from our website www.cats.org.uk and our information for vets section www.cats.org.uk/cat-care/vets-info

Emma Lane

BSc (Hons)



Emma has a degree in Animal Science and Behaviour Studies from De Montfort University Lincoln. She spent time being a vet nurse and working in the pet retail sector before coming to CP in 2008. Emma's role now is the Welfare Support Supervisor p/t, and she has a keen interest in feline behaviour and welfare. Emma is a mum to three boys which keeps her busy outside of work.

Feline shelter medicine principles for the vet in general practice

Christine Lee Hui En BVetMed (Hons)

Imagine being taken away from your home and family, having no bearings of where you are or where you will be, and not knowing what is going to happen to you or how best to protect yourself; what a frightening experience! It is important to remember that when transferred to any rescue and rehoming establishment, cats are exposed to a myriad of unfamiliar environment, people and animals (Amat et al 2016).

Challenges associated with hospitalisation.

This is also seen in general practice, particularly with hospitalised cats. Hospitalisation in a veterinary practice is unavoidable for many feline patients and a combination of a strange environment, disruption of daily routine and physical pain of veterinary procedures can negatively impact welfare and physical recovery. During my one-week stint at Cats Protection's National Cat Adoption Centre (NCAC), I learnt how positive cat welfare was ensured without compromising on disease control and veterinary care.

In general practice patient volume, time constraints and the goal to maintain hygiene and monitor patients often compromise on a hospitalised patient's ability to cope in a new environment (Rohan and Heath, 2015). Numerous methods used by the charity in minimising stress for hundreds of cats each month can be applied to general practice.

The issue with hospitalising cats is similar to that of cats entering rescue settings. The stress they face stems from their biological make up. Cats rely heavily on scent messages conveying information regarding their environment and are both solitary and territorial. Hence, strange smells, sounds, people and other animals, and an inability to perform normal behaviours can cause severe distress and fear. Stress

can manifest both behaviourally such as aggression and physically, both short-term and long-term. For example, stress suppresses the immune system leading to increased risk of Feline Idiopathic Cystitis, upper respiratory infection due to Feline Herpesvirus reactivation and gastrointestinal upset (Gaskell and Povey, 1977, Buffington, et al, 2006). Anorexia for example can aggravate conditions like fatty liver and diabetes mellitus, which can delay recovery (Amat et al, 2016). Additionally, stress may manifest in abnormal physical parameters and interfere with diagnostic tests, leading to errors in clinical findings. These include hyperthermia, hyperglycaemia, tachypnoea and tachycardia (Rand, et al, 2002).

Therefore, minimising stress is paramount in ensuring good veterinary care. Similar to managed intake procedures in shelters, veterinarians in general practice should also bear in mind the stress associated with hospitalisation before deciding whether to admit a cat. Every cat's temperament, illness and the owner's ability to treat the cat at home should be considered. If hospitalisation is considered necessary such as when undergoing anaesthetic procedures, receiving intravenous fluid therapy, respiratory distress and emergency procedures, fear and stress should be prevented (Rohan and Heath 2015).

I will focus on three principles, mainly: recognising stress, shelter design and the importance of team work.

1. Recognising stress

Staff at the NCAC are all well trained in recognising stress in cats and how to handle them. Looking at the admission process at the NCAC, for example, pens were prepared in advance so that cats can be moved in as soon as possible to settle in.

Waiting time was kept to a minimum and cats were promptly examined upon arrival. Similarly, if cats were expected to be admitted in general practice, a cat-only waiting room, and covering their carrier with a towel or blanket (as shown in Figure 1), help in preventing them from seeing other animals and making them feel more secure. The NCAC also uses a small examination room for admission which not only helps them feel safer, but also decreases the potential for cats to get trapped in inaccessible places if they attempt to run (Rodan and Heath, 2015).

Signs of stress and fear were recognised immediately by staff members. These include (Cats Protection, 2013):

- hiding: in litter box, under blanket, tearing up newspaper in attempt to hide
- position in cage: huddled at the back, up front and ready to attack
- posture: crouching, ears back, pupils dilated
- aggression: hissing towards their owner and staff

When a cat was visibly stressed, actions were taken by staff to go slowly and gently, minimising handling by doing a Woods lamp examination and applying flea treatment in a crush cage for example. Wrapping a cat in a towel is also another good example to help them feel safer when being handled as shown in Figure 2.

A calm approach is also needed when taking a cat out of a cage. It is important for the cat to leave the cage calmly throughout the process. Overly restrictive handling techniques should be avoided.

2. Shelter design

Shelter building design can be applied to hospitalisation wards in terms of enabling them to express normal behaviour without compromising on close health monitoring (Rodan and Heath 2015). The Feline Fort, as shown in Figure 4 developed by Cats Protection, is a great example in taking normal cat behaviour into account by allowing cats to hide from the sight of unfamiliar individuals, giving them the option to avoid eye contact and hence giving the cats a sense of control and allowing them to rest more comfortably (Cats Protection, 2013). Pens include a cat hide, where they can retreat to if they wish, access to a flat-topped perch for vertical space, two entry/exit holes for an added sense of safety



Fig 1: Carriers are covered with blankets to prevent cats from seeing each other.



Fig 2: A cat is being wrapped in a towel while having her nails clipped.



Fig 3: Hands-free approach – the cat is allowed to jump into their temporary home on their own

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and even a small hole for a heat pad cable. For cats on drip lines, one of the entry/exit holes can be easily placed beside a wall to prevent tangling. The material is durable and easy to clean which is good for biosecurity. A hiding place may also come in the form of a cardboard box or a bed with high sides, or a towel covering the door of the cage. A double compartment model can be mirrored in general practice by using two smaller cages and creating a pass-through if space is available.

A sense of predictability and consistency should be enforced as much as possible (Amat et al 2016). For the anorexic patient, providing small frequent offerings of food allows for more normal feeding behaviour and prevents food from going off. For long-term patients, feeding cats a regular diet

at a consistent time by the same person helps in preventing food aversion. Litter boxes should be large enough for the cat to get in and out without difficulty, and placed away from food and water. Checking with clients what type of litter is used at home and providing the same one is also ideal.

3. Teamwork

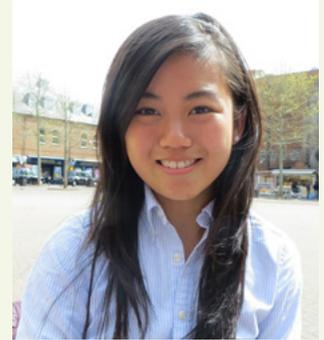
Shelter medicine involves close communication with many people outside the veterinary profession such as cat carers, behaviourists and especially the general public. In order to provide optimal care for cats, team effort and good team morale should also be encouraged in general practice. Everyone who comes in contact with cats should be involved in enhancing cat welfare. For the hospitalisation of

Fig 4: The Cat Hide (part of the Feline Fort®) in a pen at the National Cat Adoption Centre



Christine Lee Hui En

BVetMed (Hons)



Christine graduated from the Royal Veterinary College in 2017 and has since joined the Agri-Food and Veterinary Authority in Singapore. She is involved in contingency planning and formulating policies related to animal health and welfare. She is passionate about upholding the public's trust and confidence in the veterinary profession and bridging the gap between animal and public health. Outside the office, she finds time to volunteer regularly in various initiatives such as free pet wellness checks and vaccination exercises. Away from work, she enjoys having game nights with friends and spending time with her dog, Pocahontas.

cats for example, clients can be involved by moving the cat with their own bedding or belongings and giving them admission questionnaires to fill in to let the practice know more about their pet. For many out-patients, educating and referring clients to behaviourists/trainers/boarders can promote greater client understanding and empathy of their pet. Additionally, encouraging receptionists to give advice to owners to transport their cats appropriately and selling good quality cat husbandry products (adult-sized litter trays, Feline Fort) would all help in raising public perception of the practice and foster greater client relationships. Nurses and veterinarians should be encouraged to undergo training on behaviour medicine and understand how to advise clients on other stress-related issues outside the clinic, such as inappropriate urination and aggression.

Conclusion

In conclusion, the NCAC, for many general practices, models the various ways to enhance cat welfare without compromising on veterinary care and biosecurity. Because of the challenges of hospitalisation of cats, it is vital to admit cats into general practice only when absolutely necessary. It is important to provide an environment that respects natural feline behaviour and aims to meet behavioural needs of individual patients. Reducing stress of hospitalisation benefits the cat's welfare and improves the practice ability to treat and evaluate the cat. The week with the NCAC has been truly inspiring and I will strive to personally apply these principles with the charity's protocols in the future.

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How many cats are too many?

Helen Crofts RVN A1 takes a closer look at hoarding and associated issues

✓ We've all done it, we've all seen a photo of an unwanted cat or kitten and thought to ourselves, "oh look at that poor mite, I could offer it a home – just one more won't hurt." But will it? I'm sure we have all come across this person too; a kindly soul who wishes to help any animal in distress. It often begins gradually; they start off with a couple of family cats whose ranks are swollen when a local stray turns up in the garden looking for food. This one stray becomes two, three maybe more. Then people begin to notice that this kind person is always happy to help and a reputation begins to form as someone willing to take in unwanted cats. Young females in the group become pregnant and the owner fails to seek or find homes that are 'good enough' for the resulting kittens, swelling the numbers even further. Not wanting to turn anyone away who asks for help, this person slowly turns the family home into a rescue centre.

Providing a home for the unwanted is all very admirable and in itself is a wonderful thing, but when does this desire to help stop being something positive and become a problem where both humans and animals suffer?

It only becomes a problem when this well-meaning person stops being able to properly care for or house their animals appropriately, leading to neglect, disease and in extreme cases, death. There comes a point where housing cats in sufficient numbers becomes detrimental to their physical and psychological health and an overwhelmed owner fails to monitor signs of stress or illness and therefore does not provide the adequate veterinary care their charges need.

It is not necessarily a question of numbers. You could have 100 cats and it wouldn't be a problem, so long as they are all looked after, and by looked

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after this means in accordance with the five welfare needs as laid out by the Animal Welfare Act 2006. Individuals may accumulate a number of cats but care for them to a high standard by providing veterinary care, ensuring all members are neutered or prevented from indiscriminate mating and by attending to their behavioural needs. Many breeders have numbers that could justify the concern of 'hoarding' but it is only when the animals suffer as a result of being kept in numbers that they may be classified as such.

It can be hard for some individuals to know when enough is enough. Some people begin collecting animals after a traumatic event or loss, while others see themselves as 'rescuers' who save animals from lives on the street. Elderly people may be more at risk of slipping into the 'rescuer' mode due to their own deteriorating health and isolation from community and social groups. Caring for animals can give an isolated person a sense of purpose. Whatever the original motivation was, for some, it becomes impossible to know or understand the point at which they are no longer able to cope. They often continue to expand their household and fail to notice or appreciate any resulting reduction in their general level of care.

The consequences for cats living in poor conditions include:

- inter-cat and stress-related problems associated with social over-crowding, eg urine spraying, inappropriate urination and defecation, inter-cat aggression
- disease associated with over-crowding/poor nutrition, eg dental disease, cat flu, ringworm and other infectious diseases
- female cats experiencing multiple pregnancies
- diseases associated with inter-breeding
- lack of socialisation leading to fear of humans
- prevalence of fleas, worms and parasites
- environmental health issues such as high levels of urine and faeces with the associated stench and contamination

Owing to the health and welfare consequences, to both animals and humans, of allowing animals to live in overcrowded or unhygienic conditions, it is important that we are all aware of the tell-tell signs of a person who is struggling to cope.

The person in question may feed local stray cats or feral colonies – there may be a large number of cats in the vicinity. Their property may be in disrepair



A litter of kittens can quickly add to the number of cats in the household.



On arrival

Just some examples of cats coming into CP care from a multi-cat household



After three weeks in care



On arrival

with rubbish outside and piled against the windows, there may be a strong smell coming from it and even large numbers of flies at the windows. The owner may be known to neighbours as 'reclusive' and generally reluctant to let anyone in the house.

Any concerns regarding the welfare of the animals in the care of any rescue facility or an individual should be raised with the appropriate authorities, in the UK this would be the RSPCA/SSPCA/USPCA. People who are struggling to cope due to a physical disability may find help and guidance available from their local social services department.

Remember to view these well-meaning people with compassion. What started out as a kindly act has spiralled out of control and many people feel embarrassed to seek help for fear of judgement or reprisal. Many will also fear the removal of some or all of their animals.

A word of comfort: if you love your cats and are worried it might spiral out of control, there's probably no need to worry. Not just anyone will become a hoarder. However, hoarding is on the rise and we should all be aware of the signs and offer our support as a community and not just rely on the professionals working in the pet care sector.

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After three weeks in care

Helen Crofts

RVN A1



Helen is a registered veterinary nurse and has spent many years working in private practice. After making the move to the charity sector, Helen is Cats Protection's Veterinary Support Supervisor. She has lots of hands-on experience with cats alongside a wealth of knowledge on general cat care and welfare. She is also a qualified Clinical Coach.

All the latest news from Cats Protection

All-Party Parliamentary Group on Cats puts feline welfare on the political agenda

In early March this year, the first All-Party Parliamentary Group (APPG) dedicated to improving feline welfare was launched at Westminster. The group is made up of MPs and Peers with the support of Cats Protection and Battersea. The APPG on Cats, abbreviated to APGOCATS, will discuss feline welfare and how to tackle key cat issues both in parliament and in society more widely. The group will investigate solutions to a range of problems facing cats and cat owners and have great interest in looking at the benefits to health and wellbeing of owning a cat, particularly to combat loneliness. Other topics the group will consider include the laws on air guns, toxins contained in antifreeze, microchipping, pet passports and snares. The group will next meet in June. Maria Caulfield MP, who was elected Chair at the meeting, said: "As a cat owner myself, I'm very pleased to have been elected Chair of a group which recognises the important role cats play in many people's lives, and which will work to better protect the needs of both cats and their owners."

"Cats are wonderful animals and provide much love, support and companionship to a wide range of people, from young families to elderly people living on their own."

Cats Protection's Head of Advocacy & Government Relations, Jacqui Cuff, said: "Cats are one of the nation's most popular pets and their welfare is of huge importance to millions of owners. Yet despite their popularity, cats all too often suffer from a lack of specific legislation to protect them. Where legislation does exist, there are often enforcement and prosecution issues, which need to be addressed. It's entirely right cats are now going to have their own group in Parliament to put a spotlight on feline welfare issues. We're excited to work with this group as it strives to improve the lives of cats in the UK, something which will also be greatly welcomed by millions of animal lovers."



Kids and Kitties campaign a great success!

From 16-31 May, we ran our Kids and Kitties campaign offering advice for parents and expectant parents who own cats. A new survey revealed that around half of expectant parents have concerns about cats and children, yet very few seek advice on the topic. Cats Protection receives hundreds of calls each year from people wanting to give up their cat for reasons related to children or babies, so to dispel the myths we created a wealth of new resources to help put their minds at rest. We created a new visual guide with tips for preparing your cat for the arrival of a baby, lots of new videos

giving advice on cat behaviour and toxoplasmosis, and even a free download of baby crying sounds to get cats used to having a wailing baby in the house.

Although the campaign is now over, all of the resources are still available on our website at www.cats.org.uk/kids-and-kitties

They make excellent content to share with anyone who has concerns about cats and kids and will hopefully encourage people to keep their existing pets in the family or adopt a new feline friend for their children.

Cats Protection delivers 100,000-strong petition to 10 Downing Street calling for a change to air gun laws

Cats Protection has delivered a 100,000-signature petition directly to 10 Downing Street to call for a change in the law on air gun ownership in England and Wales.

Thank you to everyone who took the time to sign our petition. The petition is still live, as it is helpful to continue to get as many signatures as possible. You can sign the petition at

www.cats.org.uk/airgunpetition

The petition is part of a major campaign by the charity for legislation on air guns to be brought in line with stricter regulation that already exists

in other parts of the UK. Along with over 50,000 supporters, the charity has also written to the Home Office calling for air gun licensing as part of a government review.

Cats Protection's Head of Advocacy & Government Relations Jacqui Cuff said current laws in England and Wales meant there are not sufficient safeguards to stop air guns falling into the wrong hands.

At the time of writing, we are waiting to hear the Government's next steps.



Cats Protection's Chair of Trustees, Linda Upson delivered the petition to Prime Minister Theresa May at Downing Street on Wednesday 9 May with Dominic Sullivan, acting Chief Executive.

Paws Protect update – one year on!

Paws Protect has now completed its first year as a stand-alone service and it has been a really positive year. This is evident when looking at the stats for the service as compared to previous years when Cats Protection was still in partnership with the Dogs Trust Freedom Project.

As a standalone service, we started to accept referrals directly from the owners, which allowed us to build up better relationships with them, and this in turn has enabled us to better meet their and their cats' needs. In our first year we are proud to say that we were able to help a total of 67 cats (15 of which were carried over from the Freedom Project), which is more than double that of previous years. Of these 67 cats, 40% were returned to their owner, 18% were signed over to CP for rehoming (due to the housing system taking much longer than expected or tenancies that do not allow pets) and the remainder were carried over into this year, many of which have since been reunited with their owners. We also managed to recruit 10 new fosterers, which brings our total to 20 fosterers. This has enabled us to expand the area that we cover from London, Hertfordshire and Essex to now include Kent, Sussex and Surrey.

In order to facilitate the expected increase in referrals, we have recruited a second Paws Protect Assistant. We were also very fortunate last year to win a competition with a production company called Through the I who kindly made us a video to promote the service. This was released on Cats Protection's Facebook page and YouTube page and can also be found on the Paws Protect website.

<http://bit.ly/cp-PawsProtectvideo>

If, during the course of Cats Protection's work, anyone encounters individuals fleeing domestic abuse looking for support with their cats, please direct them to Paws Protect. Even if they are outside the catchment area, we have information on other organisations providing similar services that we can direct them to. Due to the sensitive nature and inherent security risks involved with providing this service, it is important that branches do not take on these cases unless the cats have been signed over for rehoming – always refer to the Paws Protect team for advice if you are unsure. For ways to support the service, please visit our website: **www.cats.org.uk/paws-protect**, call **0345 260 1280** or email **Pawsprotect@cats.org.uk**



Paws Protect
Cat fostering for people fleeing domestic abuse

Shelter medicine elective at CP for Glasgow final year vet students

This year saw two final-year veterinary students from the University of Glasgow spend a fortnight at our Cats Protection's Glasgow Adoption Centre as part of their shelter medicine elective.

The students spent time at both the shelter, as well as the vet clinic providing veterinary care for the cats at the Glasgow centre. By getting involved in all aspects of the cat care from admissions, to pen cleaning and medicating of the cats, the students got an in-depth look at both the management and daily running of the shelter, and common issues that may be encountered. The time at the vet clinic allowed for hands-on practical experience to be gained during neutering and gave the students a good insight as well as the practical application of shelter medicine principles. Assisting with the 'vet runs' at the shelter and follow-up visits as well as administering prescribed treatments to cats allowed the students to get to grips with the various processes involved in providing veterinary care to shelter cats.

We think this is a really great opportunity for students to get a better understanding of the 'herd health' approach that often has to be taken in a shelter setting, while still ensuring that each cat is treated and dealt with as an individual. It is encouraging to see that more universities are offering shelter medicine opportunities such as these. Many vets in practice are involved with shelter work at one stage or another in their career and opportunities like this will better prepare new graduates for these situations and highlight other career and employment avenues eg shelter medicine internships.

Norbrook offers vets and pet owners complimentary arthritis webinars

Osteoarthritis (OA) is a common problem, estimated to affect more than 90% of elderly cats. Diagnosis is not always straightforward as recognition of pain is difficult in cats, and cats affected by OA tend to adjust their lifestyle rather than showing specific signs of OA. Management options for OA include environmental modification, joint supplements, therapeutic diets and analgesics. Use of analgesics can be complicated by presence of concurrent illnesses, most common of which would be chronic kidney disease. This presentation will update practitioners on how best to diagnose and manage this condition, focussing on older cats.

Norbrook is offering veterinary surgeons and pet owners complimentary training by arthritis experts as part of its ongoing commitment to Continuing Professional Development (CPD).

The training includes a four-part series of small animal arthritis webinars for veterinary surgeons, and three webinars covering arthritis management for pet owners.

Through the series, which runs over September and October, Norbrook hopes to educate both small animal veterinary surgeons and pet owners about arthritis and suggest home improvements they can provide to help pets, as well as build communications between vets and pet owners.

Register for the webinar <http://bit.ly/vetwebinars>