The Feline Magazine from Cats Protection for Veterinary Professionals



# An insight into flea and tick infestations

# **Fat cats**A weighty problem

# **Toileting 101**Getting caught short

## Get in contact







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Printed by: Treetops design and print

Reg Charity 203644 (England and Wales) and SC037711 (Scotland)



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## Meet the team



#### Lauren Kirk

How long have you worked for Cats Protection? I started in June 2018.

What did you do before working for Cats Protection? I worked for other animal charities including the RSPCA and

#### PDSA. I also spent time abroad volunteering for veterinary clinics and taught on the RVC's shelter medicine programme.

What is your role within Cats Protection? I am a vet at the National Cat Adoption Centre and provide veterinary care for all the cats that come through the centre, ensuring they are fit to be rehomed.

#### What do you like most about your job?

I love it when we are able to turn a cat's life around and see them go off to a new home.

## What is your most memorable Cats Protection moment?

Helping to treat Karen, a kitten who was dumped in a box in the forest. Seeing her go to her new home was a lovely moment.

#### Do you/did you have a pet/pets?

I have Betsy, a rescue cat from a previous job. She needed a place to recover after a road traffic accident: I took her home for a few weeks and she never left!

#### What are your hobbies/other interests?

I love travelling, festivals and have a camper van that I spend a lot of time exploring in during the summer. I have a threeyear-old daughter who keeps me very busy.

#### Where is your favourite place to visit?

A remote corner of Cornwall in my camper van is my happy place.

#### If I wasn't doing this, I'd probably...

Be doing this somewhere exotic!

# Guarding against cat flea and tick infestations

lan Wright offers a specialist insight on how to successfully guard against these common parasites

Flea and tick control form an essential part of routine parasite control for cats. Fleas are highly prevalent on domestic cats with a recent UK survey finding 28.1% of cats to be infested (Abdullah et al, 2019).

What has been largely overlooked however, is the number of cats that are also exposed to ticks and the role they might play in spreading tick-borne pathogens.

#### Fleas

The fundamental difference between pet infestations with fleas and ticks endemic in the UK is that flea populations establish in homes, where ticks are mostly encountered outdoors. Fleas are present throughout the UK, with the vast majority on cats being the cat flea Ctenocephalides felis (fig 1.) Cat fleas are well adapted to living in the humidity and temperatures maintained in most UK homes and can live on a variety of hosts including dogs, ferrets and rabbits. They cannot reproduce on humans but do bite leading to irritation and sometimes severe local reaction (fig 2.). Flea allergic dermatitis remains the most common skin condition in UK cats and heavy infestations can lead to marked and sometimes fatal anaemia. Cat fleas can also transmit a variety of infections including Bartonella henselae (cause of cat scratch disease), Rickettsia felis (cause of spotted fever), Haemoplasma spp (cause of feline infectious anaemia) and Dipylidium caninum tapeworms. 11.3% of flea infestations on UK cats and dogs have recently been found to be positive for Bartonella spp (Abdullah et al, 2019), meaning up to 40,000 pets in the UK may be carrying infected fleas. People are thought to be exposed to this pathogen primarily through exposure to flea faeces.

Flea control is therefore essential to reduce feline disease risk, zoonotic transmission and maintain a strong, healthy relationship between pet and owner. Successful flea control strategies require consideration of the flea life cycle and prevention of further flea >

multiplication within the home. Failure to do so will lead to flea control breakdown and subsequent owner frustration and pet morbidity.

#### Flea control

The most important aspect of flea control is to ensure adult fleas are killed on the pet before they can initiate egg production. Treatment of the environment with insect growth regulators, environmental insecticides, hot washing of bedding and daily vacuuming is also important to reduce environmental larvae and eggs. Reducing pupal numbers in the environment is difficult however, making effective, rapid killing of adults essential.

#### Use of an effective adulticide

Adult fleas can lay eggs within 24 hours so the adulticide chosen must kill fleas at least within that time. They must also be administered frequently enough to continue to prevent flea egg laying. The time after application of the adulticide at which fleas survive long enough to lay eggs is known as the "reproductive break point". If the reproductive break point is reached, flea control will fail. People may activate flea pupae and then move newly emerged adults into homes. Cats are also very effective at moving fleas from one household to another. Once introduced, fleas can feed and multiply on any pets, including indoor cats, making year-round prevention essential.

#### Effective environmental control

Environmental treatment to reduce eggs, larvae and pupae will decrease the time required to bring an infestation under control. Spray cans containing a larvicide/ovicide and an insect growth inhibitor used in household environments are useful to reduce flea and larval numbers, while also preventing development into pupae. When treating the environment directly, all areas where pets frequent such as cars, furniture and bedding must be treated. Effective penetration of chemicals from aerosol-based products can be poor unless used from the correct distance and after removal of obstructing objects such as children's car seats, pillows and cushions. These should be treated separately. Care must be taken to ensure instructions are followed carefully and fish, birds, invertebrate pets and cats are removed while treatment is taking place.



Figure 1: Adult cat flea and eggs



Figure 2: Flea bite reaction

Systemically acting products containing lufenuron can be used in pets to prevent flea eggs from hatching. Some adulticides such as imidacloprid and selamectin are shed into the environment after the pets have been treated, reducing environmental egg and larval contamination. Some spot-on flea products also contain growth regulators to achieve a similar effect. Daily vacuuming of areas frequented by flea infested pets has also been demonstrated to reduce pupae numbers in the environment, as has hot washing of pet bedding at least 60 degrees Celsius. Although an adulticide alone used on all pets frequently enough will break the flea life cycle, without treatment of the environment some flea infestations will take many months to eliminate (Dryden et al, 2000).

#### Management of expectation

Household flea infestations take at least three months to eliminate, even when environmental treatment is used. If this is not effectively communicated, pet owners can become disillusioned and frustrated. Therefore, it is important not only to stress the three months minimum treatment time but that it can take considerably longer to bring existing infestations under control. >



Figure 3: Removal of tick with tick hook



Figure 4: Ixodes tick nymph

#### **Ticks**

As well as gathering data on dogs, the Big Tick Project organised by Bristol University and sponsored by MSD, also investigated ticks on cats. UK vet practices were asked to check cats coming into practices, record if any ticks were present and submit any they found. 6.6% of cats were found to have ticks. This is not as high a number as dogs (approximately one in three) but still a significant number, given that there is a perception among some pet owners and vets that ticks are not a problem in cats. Purely indoor cats are at very low risk of tick infection so prevalence in cats with outdoor access is likely to be much higher. Male cats, those four to six years of age, those living in rural areas and those not neutered were found to be at greatest risk of infestation (Davies et al. 2017). This demonstrates that lifestyle factors (young, male entire cats are more likely to roam) and geographic factors (rural areas are likely to have higher number of ticks) influence the likelihood of cats being exposed.

The observation that cats with outdoor access are vulnerable to tick infection is also supported by real-time data such as that recently published by Liverpool University (Tulloch et al, 2017) and the Tick Surveillance scheme (Wright et al, 2018). These studies confirmed that ticks were found on cats throughout the year in most parts of the country but with marked seasonal peaks through the spring, summer and autumn. Ticks found on UK cats are Ixodes spp with Ixodes ricinus, and Ixodes hexagonus predominating. Both these species are capable of transmitting Borrelia spp causing Lyme disease, and Borrelia spp were found in 1.8% of ticks on UK cats. Anaplasma >

phagocytophylum and small Babesias such as B.microti and B.vulpis. capable of causing disease in pets were also found in 1.1% of the ticks (Davies et al, 2017)

Cats are competent hosts for Anaplasma phagocytophilum which is endemic in the UK. Infection can lead to lethargy, lymphadenopathy and fever and is likely responsible for some pyrexias of unknown origin in cats. Data concerning the current incidence of Lyme disease and prevalence of Borrelia spp in UK cats is lacking. A small study of cats with clinical signs possibly associated with Lyme disease was carried out by Shaw et al (2005). Sixty systemically unwell cats were tested for Borrelia burgdorferi by PCR and two were positive. There were no statistically significant associations however, between the infections and the clinical signs shown. Cats appear to have some natural resistance to developing the clinical signs of Lyme disease if infected but show similar histological changes to dogs and humans suggesting that some pathology as a result of infection can occur. Avoiding exposure to infection is therefore desirable. Although not present in the UK. Cytauxzoon spp found in North America and Africa and Babesia felis found in Africa are highly pathogenic in cats and a concern for cats travelling abroad or that have been imported from these countries

Although the prevalence of many tick-borne diseases in cats is unknown and the prevalence of Borrelia spp in cats across Europe is thought to be low, cats have the potential to act as transport hosts bringing ticks from wildlife reservoir areas to more peri urban and urban environments where infected tick populations may then establish in much closer proximity to human populated areas. Cats travelling or imported from abroad may also bring Ixodes ricinus ticks infected with tick-borne encephalitis virus which has spread rapidly across Europe and carries a 1-2% mortality rate in infected people. Cats may also be infested with Rhipicephalus sanguineus ticks which carry a range of tick-borne pathogens and can establish infestations in people's centrally-heated homes. It is important that ticks found on imported pets are identified to establish if house infestation is a risk and which tick-borne pathogens they may be carrying.

This can be done by veterinary professionals in practice using the University of Bristol tick identification key www.bristoluniversitytickid.uk or sent to the Public Health England Tick Surveillance scheme www.gov.uk/quidance/tick-surveillance-scheme

In addition to these tick-borne pathogens, ticks can cause anaemia in cats if present in large numbers, local bite reactions, infections and dermatitis, as well as reducing the human-animal bond due to owner revulsion at their presence. All of these things make adequate tick control in cats at risk of exposure essential >

#### Tick prevention

Tick preventative products should be used in cats travelling abroad, those with a history of tick exposure or at high risk of infestation. This includes young cats, those with prolonged and regular outdoor access and those living in rural areas. Use of products that rapidly kill or repel ticks will significantly reduce disease transmission. The isoxazolines or an imidacloprid/ flumethrin collar are all useful for this purpose but none are 100% effective so if possible, it is also important that owners regularly check their cats for ticks and remove any found. Permethrin and deltamethrin products should be avoided in cats due to toxicity risks.

Ticks should be removed with a tick removal device (fig 3.) or fine pointed tweezers. If tweezers are used the tick should be removed with a smooth upward pulling action. If a tick hook is used, a simple "twist and pull" action is employed. It is important that ticks are removed without stressing them. Squashing or crushing ticks in situ with blunt tweezers or fingers will stress the tick leading to regurgitation and emptying of the salivary glands, potentially leading to increased pathogen transmission. Traditional techniques to loosen the tick such as the application of petroleum jellies or burning will also increase this likelihood and are contra indicated. There will also be a very limited window of opportunity with most cats to remove the tick so delay should be avoided! Nymphs are very small (fig 4) and can be difficult to spot in cats, especially if the coat is long. Data from the tick surveillance scheme suggests that ticks are more likely to be present around the head and neck so in fractious cats, this is where examination for ticks should be concentrated (Wright et al, 2018).



Studies confirmed that ticks were found on cats throughout the year but with seasonal peaks through the spring, summer and autumn.

#### Conclusion

Flea control remains vital in cats to reduce feline disease, zoonotic risk and grow the wonderful bond between pets and their owners. Tick control though, should not be forgotten. The importance of their control in relation to the health of cats is only just beginning to be fully explored in the UK, but their potential to expand the range of tickborne diseases and their vectors should also not be underestimated. C

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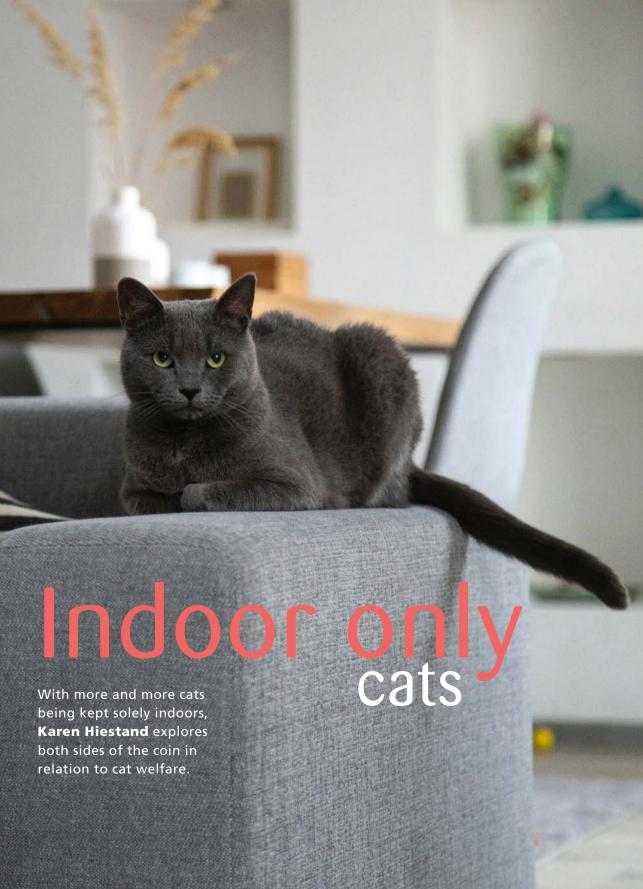


## lan Wright BVMS MSc MRCVS

lan is a practising veterinary surgeon and co-owner of the Mount Veterinary Practice in Fleetwood. He has a Masters degree in Veterinary Parasitology, is head of the European Scientific Counsel of Companion Animal Parasites (ESCCAP) UK & Ireland and quideline director for ESCCAP Europe.

lan is regularly published in peer review journals, and an editorial board member for the Companion animal and Vet CPD journals.

He continues to carry out research in practice including work on intestinal nematodes and ticks.



The keeping of companion cats solely indoors is a growing trend across the world. In the UK, reports suggest indoor-only homes make up over 30% of owned cats, with the rates significantly more in other parts of the world.

In the US it is far less common to allow cats to roam freely outside and the urban nature of many companion cat owners in the Far East, where cat ownership is increasing markedly, means that the majority are kept indoors. Even in previously free-ranging countries such as New Zealand and Australia, concerns over wildlife predation put ever-increasing pressure on cat ownership, and places requirements over their ability to roam outside.

Whether cats are best kept entirely indoors, provided contained outdoor access or ought to be able to roam freely can be a contentious issue with proponents of different views often holding them strongly. Rehoming organisations can be caught in the middle of these different opinions. Individuals within organisations

will have their own views, as will owners being homed to, which can lead to conflict such as organisations refusing to home to indoor-only situations and turning homes away, or alternatively prescribing an indoor-only home as an only option. >

#### Why indoor-only?

The reasons for keeping cats solely indoors are varied - as is the evidence base from which these reasons are drawn. There is increasing awareness and concern over the predation pressure exerted by domestic cats on wildlife. In some areas such as New Zealand and Australia, there is a high moral value placed on native species by society, leading to a conflict between those who can more easily view any introduced species as a 'pest' and those who place value on the companion cat. In the UK, concern over domestic cat predation, particularly of birds, regularly pops up in the social discourse with opinion leaders such as Chris Packham highlighting the issue of feline predation, however evidence of the effects of cat predation on populations is less than clear (see RSPB link in references).

In the UK we are fortunate to have less risk of our cats being predated upon. One eminent American veterinary speaker has been heard to advise that 'you can't vaccinate against pickup trucks and coyotes', and a National Park Service survey of coyote faeces in southern California revealed that cats may make up to 20% of their diet (see link in references). However, predation from 'bad people' is not an uncommon concern in the UK, where reports of negative human activity such as pet theft and the Croydon and Brighton 'cat killers', has generated fear.

A common reason for keeping cats confined indoors, and one that is prevalent in the North American view, is based around safety – both the duty of owners to keep cats safe and as protection for owners against the negative experience of losing a loved pet prematurely and in tragic circumstances. Road traffic accidents (RTAs) seem an obvious and significant risk, however what is interesting is the variety of views on this. Some seem to accept being struck by a car as a tolerable risk of accessing 'freedom' and living a 'natural' life. Others, particularly if having had a traumatic experience of losing a companion animal to a car accident, may view this as a risk not worth taking. Of course, there are differences in road traffic risks depending on where you live, rural vs urban, busy vs guiet roads etc. However we may not be as accurate as we like to think in assessing these risks. For example, the Bristol cat study found RTAs occurred at 3.9% in owned cats (71% fatality) and contrary

to what many people think, rural locations and long, straight roads were associated with a higher likelihood of RTA than urban and suburban

The spread of disease is another key risk of outdoor access; from more easily prevented and treated parasitic diseases, to nastier and life-threatening viral diseases and including the never-to-be-messed-with rabies. The likelihood and seriousness of disease differ by region, and we remain fortunate in the UK with regard to the relative risks associated with possible disease here compared to those elsewhere. One health risk of outdoor access common in the UK is that posed by cat fights. While as vets, we can be unashamed in our enjoyment of a good, flocculant abscess, there is no doubt they are distinctly unpleasant for the cats themselves. Health monitoring is also made far easier by keeping cats indoors, as anyone who has fruitlessly attempted to get a faecal or urine sample from an outdoor roaming cat, unused to a litter tray, will attest.

There are some less contentious reasons why a cat may be housed in captivity such as mobility issues, blindness, or FIV positive status to protect both the affected cat and prevent others being infected, although the latter is increasingly debated. Still others believe that some breeds ought not to go outdoors or that individual cats who have only lived indoors may similarly 'not hack it'. However, in my experience, previous lack of outdoor access in no way predicts a cat's ability to thrive outside. Furthermore, it might be worth considering asking why and investigating the environment as a barrier rather than assuming it is something inherent about a cat, when one chooses not to go outside when the opportunity is available. >



Figure 1: Obesity may be more prevalent in cats with indoor access only



Figure 2: Playing dress-up is certainly not part of the cat's ethogram

#### Why outside access?

Allowing cats access to the outdoors clearly affords them greater opportunity to express their normal behaviours; patrolling territory, scent marking, claw maintenance, toileting in appropriate locations and hunting. As with any species, freedom to engage in a fuller behavioural repertoire seems likely to result in improved welfare. Cats kept indoors may well be safer and protected from many diseases, but there are health implications. Natural feline behaviours, when expressed in an indoor environment become problematic to owners leading to interventions such declawing and can result in breakdown of the human-animal bond due to frustration aggression or 'inappropriate' elimination. Furthermore, the scourge of obesity as well as stress-related disorders such as cystitis may be more prevalent in cats without outdoor access.

Some cats love being near humans, some (eg ferals) really, really don't, and yet others (probably the majority) experience their best welfare when they can control the amount and quality of their interaction with humans. Allowing these 'inbetweeners' access or escape to an outdoor environment and distance from humans may be hugely important to their ability to cope and thrive as companion cats. However, not all outdoor access is created equal. The high-water mark of providing cats with freedom and choice is a well-placed cat flap: easily and safely accessible,

ideally microchip controlled. Cat flaps that allow other cats access can be a cause of significant issues – the invasion of a cat's core territory by an unfamiliar cat being a great cause of stress. In many homes, outdoor access is regulated by humans, and can range from the predictable to the very much not. Control and predictability are determinant factors of depression (eg antidepressants are tested on rats made 'depressed' by reducing their perceived control and predictability over their environment) and it's highly likely that when the resource of outdoor access (and often toileting) is controlled by humans, that this may present a significant stressor to our cats.

Proponents of outdoor access focus on the freedom and emotional welfare benefits, often ascribing to what can be expressed as an animal integrity view - where it's recognised that roaming, hunting and generally interacting with the outdoor environment in all its risks, is just what being a cat is all about. Under this view, the duty of owners becomes more about providing companion cats with a full and rich life experience as a 'cat' rather than perhaps a longer one as a dressed-up 'fur baby'. This duty is often expressed in a number of countries' animal welfare legislation, by the inclusion of behavioural expression in the five freedoms. However, placing value, and assuming welfare benefits, of natural or normal behaviours is not always an exact science and the equating of safety afforded by an indoor life against the freedom of outdoor access is tricky arithmetic. >

Within this debate, it is important to explicitly raise a comparison that the human use of animals as companions may be not so different ethically to other human uses such as for food, other bioproducts, sport, lab testing or working animals. Practising vets perhaps know more than most that the relationships and indeed love, humans might feel for individuals and species used as companions, does not necessarily equate to higher animal welfare. Certainly, humans gain enjoyment and myriad positive aspects from using cats as companions, and cats in turn gain much from us – but not all consequences of these relationships are positive. People approach their relationships with animals from various ethical perspectives – from those who prioritise human experiences above other animals unquestioningly, to those who afford individuals of other species value in and of themselves, with the middle ground of utilitarian weighing up of costs and benefits being where the majority loiter.

For example, some may hold the view that a cat kept indoors cannot have its needs met adequately regardless of the best intentions of an owner, and as such using this species as a companion in this way is ethically unacceptable. This perspective is comparable to views about other species who may be used as companions such as reptiles, caged birds and particularly parrots. An opposing view could consider breeding cats to be more suited to human lifestyles by selecting for sociability, reduced territoriality, placidity. reduced hunting behaviours etc. For some, this method goes against what we value and hold integral to felids - what Rollin calls telos or, the 'catness' of the cat. But this process has gone on implicitly and explicitly in farm animals such as pigs where breeding for reduced 'pigginess' is seen as one way to reduce the welfare impacts of intensive production.

The keeping of cats indoors is likely to remain a contentious issue. The power of language used in this debate ought not to be underestimated. Safety, freedom, naturalness, pest, captivity, confinement and welfare all carry powerful connotations to different audiences depending on their receptivity and perspective. Ultimately, in keeping with most human uses of animals, this may be one of those issues where pragmatism will win out over idealism. Indoor only cats are unavoidably growing in number across the world, and for those who feel this represents a welfare issue, focussing on mitigating the effects may be the most impactful way to concentrate energy.

Providing cat keepers with complete information on cat welfare needs which includes their mental wellbeing, providing enrichment opportunities that are varied and species suitable eg teaching owners how to play with cats (appropriate toys, mimicking hunting behaviours) and that it need only last for a few minutes, a few times a day, can have huge benefits. Similarly, greater understanding of the welfare and health impacts that can arise from a life indoors coupled with using evidence when weighing up the relativity of risks in outdoor lifestyles (such as the importance, or not, of busy roads or the coping abilities of some individuals and breeds) may result in those that can – being granted outdoor access. While it carries ethical questions, breeding cats to be more sociable, less territorial and more suited to human lifestyles certainly carries with it the possibility of happier relationships and increased feline welfare. C



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#### Karen Hiestand **BVSc BSc MSc MA MRCVS**

Karen trained in New Zealand and worked as a clinical mixed-animal vet for nearly 10 years in her home country, as a locum across the UK and as a volunteer overseas on numerous TNR and population control programmes. She has worked extensively in animal welfare charities and veterinary education and continues to provide welfare and ethics teaching to veterinary schools and animal welfare organisations.

Karen has a Masters degree in Applied Animal Behaviour and Welfare, Medical Ethics and Law, a BSc in Psychology and is completing a residency with the European College of Animal Welfare and Behavioural Medicine (AWSEL subspecialty) alongside her PhD at Sussex University investigating the role of cross-species empathy on the bond between humans and companion animals. She is a member of the ICC 'feline wellbeing panel'.



It is estimated that around one in three of our pet cats are overweight and the problem is seen in increasing numbers in vet surgeries and rescue centres across the country.

Pet obesity is quite literally a huge and growing problem because, just like us, cats that are overweight experience a poor quality of life and have an increased risk of serious disease such as diabetes. osteoarthritis and urinary tract disease.

The cause is usually quite simple; cats gain weight when they eat more calories than they burn. Unintentionally, we often feed them too much, offer an inappropriate diet, give extra treats and titbits, while not encouraging enough physical activity and mental stimulation to help burn off excess calories and avoid boredom.

It can be hard to decide if your cat is overweight simply by looking at them. After all, most weight gain is gradual and so owners often fail to notice that their pet is chunkier than they should be. To decide if your pet needs to lose weight it might be helpful to observe your cat going about their day to day activities. Your cat should be able to do all the things they used to do such as jump with ease, groom and play. You should be able to feel your cat's ribs easily when you stroke their body lightly and you should clearly see a waistline when you look at them from above.

#### Prevention is better than cure

Preventing a cat from becoming overweight or obese is vital and it is easier to avoid weight gain in the first place than to lose it after the pounds have piled on. It is therefore important from the outset to provide the correct diet for your cat. How much you give depends on the type of food (wet or dry) you give your cat, their size, age and their level of activity. Follow the advice given on the food packet for the daily amount and then monitor your cat's weight periodically. It is very important to avoid overfeeding. A good tip might be to start off feeding the minimum amount recommended and then adjust upwards if necessary. Neutering causes a decrease in a cat's metabolic rate and once neutered, cats typically have reduced energy needs of around 30%, so it is worth cutting down their daily amount accordingly. >

Cats have evolved to eat little and often – in the wild a cat would eat around 10-12 small meals throughout the day. To get these meals, the cat would have to expend a fair bit of energy stalking and catching their prey, thus really having to work for their meals. Consider splitting your cat's daily food allowance into two or three smaller meals to mimic their natural feeding habits.

Be wary of leaving food down all day as some cats are not good at self-regulating. Keep the amount small and take it out of their daily allowance. It is always best to weigh the correct amount out each day, as it is easy to underestimate a cat's portion size.

Remember, what looks like a small meal to us is probably a feast for your cat!

#### The calories add up

Understandably owners enjoy giving treats to help strengthen the bond with their cat but in reality, cats often appreciate attention or playtime with their owner more than food treats. So why not grab an interactive toy and play with your cat instead of giving them a tasty morsel the next time they miaow at you? Even just stroking your cat when they seem to be

pestering you for food will often placate them. If you are going to give a food treat, remember to limit the amount given so your cat doesn't gain weight. It is best to stick to cat food treats rather than leftovers or raw meat, although a little bit of well-cooked fresh chicken or fish is fine. Take these extra treat calories into account when determining your cat's daily food allowance.

#### Activities and exercise help

Exercise is such an important part of weight control so indoor cats are particularly prone to obesity. Cats that do not go outside are at risk of the consequences of a sedentary lifestyle. It is essential to provide these cats with an environment which will encourage them to use up excess energy. Providing dry food inside puzzle toys will not only provide mental stimulation but will encourage your cat to burn calories as they figure out how to get the food from the puzzle. A puzzle ball is even better, as the cat needs to move around to obtain food from the ball. Encouraging your cat to play with fishing rod toys and other toys for even just five to 10 minutes at a time, three to four times a day is a great outlet for their natural desire to display hunting activity and will keep your cat happy and active. And who doesn't enjoy watching their furry friend's antics? >



It is not just a lack of exercise that can lead to weight gain, sometimes cats who are experiencing stress will overeat. It can be useful to look at your obese cat's lifestyle, their environment and placement of resources, as well as their diet. Cats can be stressed by many things but one of the most common causes is multi-cat households. Cats living in the wild are generally solitary and aren't used to living in social groups like dogs, so it can be stressful for cats to live together, even if they are siblings. As cats are very good at hiding their emotions, signs of any disagreements of discontent can be very subtle and hard to spot.

Ensure that all cats in a multi-cat household have the opportunity to eat their meal on their own and undisturbed. Unlike for most of us, eating is not a social activity for cats.

If your cat is already overweight, a vet can help you find an appropriate feeding plan which will ensure that they get the right amount of food without being overfed or worse, feeling hungry. For accurate portion control it is a good idea to weigh food out daily. Many dry foods come with calibrated scoops, but it is easy to overfill these. Remember that any treats will add calories onto the daily ration and so if you like to give your cat treats throughout the day, it is much better to put a small amount of the daily portion aside so that you don't ruin the diet plan by accidentally increasing the total amount of food eaten throughout the day.

#### No crash dieting

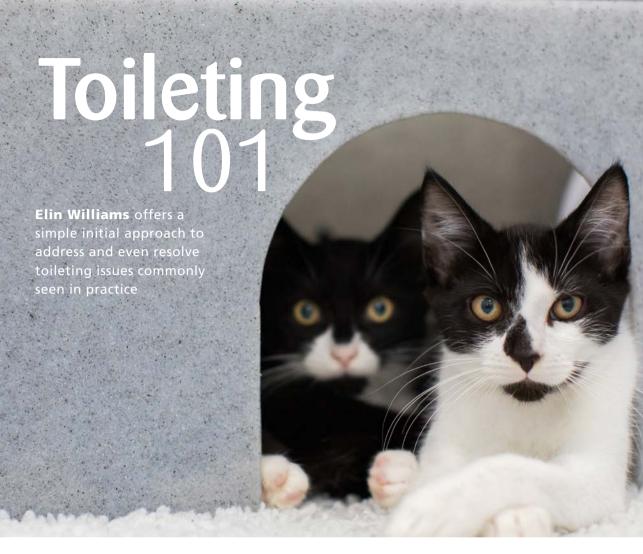
Overweight cats should never be starved or put on a 'crash diet' as any period of no food can very quickly be harmful and even fatal. A gradual, steady decrease in bodyweight is ideal as it is safer, more pleasant and more successful and maintainable in the longterm. Work in partnership with your vet to devise an achievable, gentle plan. But be patient, it may take up to a year for a severely overweight cat to reach their ideal body condition. Stick with it, the improvements to your cat's lifestyle, welfare and health will be well worth the effort. C





#### 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.



Inappropriate toileting in felines is a behaviour problem that many vets will be familiar with, perhaps because of the impact it has on the owner's life compared to other behavioural issues like excessive hiding.

While there are often cases which will need the input of a suitably qualified behaviourist there are some tips that can be given to an owner in a consult room when presented with a cat who is inappropriately toileting to help rule things out. When looking at inappropriate toileting 'first aid' advice there are two main areas to focus on: the litter tray and stress.

Cats are fastidiously clean creatures and as such a dirty litter tray can be incredibly off-putting. Ensuring that the owner is picking up deposits from the tray at least daily is a good place to start, with a full clean out and tray wash at least weekly. The use of scented cat litter can be detrimental to litter tray use, along with strongly scented disinfectants. It's worth making sure that the owner isn't using any scented litter tray liners for this reason too. >



Ledges provide access to the cat flap, but also serve as a perch

Having an appropriate number of litter trays is often overlooked, especially in multi-cat households. The golden rule for resources in a multi-cat household is one per cat plus one extra. Despite this the PDSA PAW report found yet again in 2019 that a large percentage (67%) of owners with two or more cats are only providing one or no litter tray, a trend which has increased from 2011 when the first PAW report was conducted. Providing the right number of litter trays can help with inappropriate urination as there is less opportunity for resource blocking and some cats won't use a litter tray if their companion has already used it (Ellis et al, 2017).

When providing multiple litter trays the owner will need to ensure that they are spread out around the house, not grouped together as they can then be viewed as one large latrine site instead of multiple smaller ones. Again, having the trays in separate locations throughout the house will help reduce resource blocking too.

When looking at how appropriate the current litter trays are there are a few things to discuss with the owner. For example, has the owner put the litter tray in a busy or noisy area with a lot of foot traffic? A common place for litter trays to go is the utility room as it is often out of the way, but that's where

appliances like washing machines are kept. Toileting is an incredibly vulnerable activity for cats to do so the litter tray should be placed in a quiet area, away from windows or outside doors. Most importantly cats should be left alone to toilet and not be interrupted.

The next point to discuss is the type of litter being used. The domestic cat shares a very similar ethology to their wild cousins, the African wildcat. As such they typically like to toilet on absorbent substrates where the urine will soak away and faeces is easy to hide. This is why beds and soft furnishings are popular places for owners to find urine. Trialling a different litter type with these cats is important, as they may just need a smaller grain size (Beugnet and Beugnet, 2018). Litter depth needs to be considered and litter should be 3cm deep so that the cat can adequately bury their deposits when they do use their tray.

The size of the litter tray also plays a role and if it is too small there may be accidents over the sides and it can be off putting for both cat and owner. Guy et al (2014) found that when given the option cats would choose a larger (84cm long) tray over the standard size sold in pet shops. With a rise in popularity of larger cats like Bengals and Ragdolls this could prove an issue in the future.



Creating a litter tray in cardboard box

Recent research found that cats have a preference for covered litter trays over open ones (Beugnet and Beugent, 2019b), however it was noted that they also preferred ones with a larger surface area. Some covered litter trays are a bit too small for larger adult cats to be able to get into and comfortably turn around in. A cheaper alternative is to put a cardboard box over the top of a large open tray (picture) to provide the cat with some privacy but without it being too enclosed.

While cystitis is the main medical issue associated with inappropriate toileting there are others to be aware of. For example any condition which causes pain or reduced mobility can also effect litter tray use, as if it's painful to get into cats will often choose somewhere more comfortable for them (Borns-Weil, 2019). It's also worth noting that large litter grains, like wood pellets, may be uncomfortable for older cats with arthritis in their toes to walk on which could lead them to toileting elsewhere. Cognitive dysfunction syndrome (CDS) can play a role in inappropriate toileting and this may in fact often be the first symptom of CDS, which has been found in studies to effect up to 35% of cats over the age of 11 (Gunn-Moore, 2011). Adding an extra litter tray or two for older cats can help here.

Apart from an inappropriate litter tray, stress can have a big impact in these cases, and these are the cases most likely to be presented to the practice as they have developed cystitis. While it is important to identify any specific trigger in cases of stress there are environmental changes which can help the individual cope better with the stressor.

Having a routine is really important for cats as it adds predictability to their lives such as when they are going to be fed, when they are allowed outside and when the house is most likely to be busy.

Vinke et al (2014) found that the provision of a box to hide in can have a significant impact on a cat's stress levels, at least short term in the rescue environment. As such we can help cats in the home environment by providing them with ample opportunities to hide throughout the house. Cardboard boxes make great temporary hides, you can either turn them the right way up and pop a blanket inside or cut out an entry/ exit hole for them to feel even more enclosed. Igloo cat beds are a more aesthetically pleasing option.

Another important consideration is to provide the cat with the opportunity to get up high, as cats will often choose to get up high when feeling a bit distressed. Clearing off a bookshelf or the top of a dresser or wardrobe can be a nice easy way for the owner to give their cats the opportunity to engage in this behaviour.

As cats have evolved from a solitary species they rely primarily on scent to communicate, they are also highly territorial. Because of this cats need to build up a scent profile to feel safe and the addition of synthetic pheromones, like FELIWAY® Classic, can help here (Shreve and Udell, 2017).

When considering toileting issues in the cat, it is always worth bearing their ancestry in mind. A lot of the behaviours we innately see in our pet cats can be seen in their wild-living distant relatives to this day.

To find out more about these 'basics', please see our newly launched Understanding Cats' Needs online course, suitable for all cat lovers at www.cats.org.uk/online-learning C



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#### Elin Williams BSc (Hons)

Elin graduated from Harper Adams University in 2018 with a Bachelor of Science with Honours in Animal Behaviour and Welfare. She is now working towards accreditation as a Certified Clinical Animal Behaviourist through the Association for the Study of Animal Behaviour.

Keep up-to-date with Cats Protection

# Amazing compulsory cat microchipping support

Last year Cats Protection told you about the launch of its petition to make microchipping compulsory for owned cats across the UK to help reunite missing cats with their owners. Thank you to the more than 28,000 people who have signed so far.

In October last year, the government issued a call for evidence on cat microchipping in England. This was a great opportunity to tell the Department for Environment, Food and Rural Affairs (Defra) why microchipping pet cats matters. Thank you so much to the more than 5,000 people who sent an e-letter in support of our microchipping campaign.

The government call for evidence on the microchipping of cats closed on 4 January 2020. Cats Protection will keep you updated on the government's response, which we expect to be published in April.

In the meantime, Cats Protection is continuing to press for compulsory microchipping of owned cats to be made legal. >

Thank you!



## Update to Cats Protection's feral strategy

Cats Protection has recently updated its feral strategy with the aim of improving the overall health and welfare of the UK's feral cat population. The significant changes to the strategy are:

• all feral cats undergoing trap-neuter-return should receive parasite control treatment and a vaccine against cat flu and feline parvovirus at the time of neuterina

- every effort should be made to return feral cats to their original site as this is by far the best welfare option. Feral enclosures at Cats Protection centres will be phased out and a database of outdoor homes to re-site ferals where there is no possibility of returning them to their original site, will be developed
- eight weeks is the absolute maximum age that kitten socialisation should begin if they are to become well-adjusted pets. Ideally feral kittens should be handled before the age of six weeks if they are to be socialised, as the onset of fear responses starts around this age. If adequate resources are not available to fully commit to this process, feral kittens should be neutered and returned to site

Please note that the costs of providing the parasite treatment and vaccine are not included in a Cats Protection neutering voucher and instead should be billed separately to the Cats Protection branch or centre.

To make this process easier, Cats Protection recommends creating a separate 'Feral treatment' account for invoicing these additional treatment costs.







12 and 13 September 2020

For what? Save the date for a weekend of feline-related learning.

A two-day conference consisting of one day focusing on feline behaviour, which is open to members of the veterinary profession, as well as anyone else working with felines, eg shelter staff or pet sitters. The focus of the second day will be on pragmatic medicine and feline welfare and should be useful not just for shelter vets. This day is open to all members of the veterinary profession including nurses.

Location: the comfort of your own home (or office?) due to the ongoing coronavirus (COVID-19) situation, we have decided to hold the conference virtually

For further details, please keep an eye on the 'For vets and nurses' section on our website. www.cats.org.uk/help-and-advice/information-for-vets James Yeates. Cats Protection's Chief Executive, is one of four new members of the Animal Welfare Committee (AWC) which is made up of experts in farming. wild animals and pets. It provides detailed research and advice to the Department for Environment Food and Rural Affairs (Defra) and the devolved administrations in Scotland and Wales. He becomes the only new appointee to the AWC to specialise in companion animals.

James said: "I'm delighted to be taking up this role with the Animal Welfare Committee as an expert in the welfare of companion animals. The Committee has a strong record in being a force for good, and looks set to have an ever-greater impact and importance in the coming vears.

"It's an honour to be working alongside like-minded individuals to help improve the welfare of all animals in the UK."

James has also just been appointed to Scotland's first independent Animal Welfare Commission The 12 Commission members have expertise in animal welfare and will provide scientific and ethical advice to the Scottish Government. The Commission will specifically consider how current policies take account of animal sentience, the wider welfare needs of animals and what improvements could be made. >

#### Pet fishing - Beware the dangers of buying online

Lucy's Law came into effect on 6 April in England. The law will mean that kittens can no longer be sold by a third-party seller – such as a pet shop or commercial dealer - unless they have bred the animal themselves. Instead, anyone looking to buy or adopt a kitten under six months must either deal directly with the breeder or an animal rehomina centre.

Ahead of this change in the law the government has launched its Petfished campaign – a play on 'catfishing', an increasingly common term used to describe someone who lures a person into a relationship by means of a fictional online persona. Deceitful pet sellers often use a similar tactic to 'petfish' buyers, mistreating animals and selling them at high volume to line their pockets. Unscrupulous sellers can trick prospective pet buyers into believing that the cat they're looking to purchase was raised in a healthy home. In reality, these cats may have grown up in unhealthy, low-welfare environments.



They can have severe medical and behavioural problems. The campaign aims to educate potential kitten owners about the dangers of buying their new feline friend online.

It is easy for consumers looking to get a cat to be duped online by deceitful sellers who put profit before the welfare of animals. Consumers should watch out for tricks that deceitful sellers use as the red flags can be easy to miss. The government advises to always research sellers before getting in

touch with them. Consumers can learn how to spot the signs of a deceitful seller and make sure their new pet comes from a happy, healthy environment at https://getyourpetsafely.campaign. aov.uk/

Cats Protection would always encourage potential cat owners to consider adopting rather than buving a cat or kitten. But for those who wish to buy a kitten we strongly advise purchasers to do their homework.

We've also teamed up with cat and vet organisations to create a Kitten Checklist, designed to help potential owners to ensure they choose a happy and healthy kitten. The checklist focuses on everything from signs of ill health in a kitten. to understanding their behaviour and even how to determine how comfortable the kitten is around people.

Advice on what to look for when buying a kitten, as well as a downloadable version of the Kitten Checklist can be found at: www.cats.org.uk/buying-a-kitten

#### The Vet Guide guiz

Included with the winter 2019 edition of Cats Protection Clinic was Cats Protection's updated version of the The Veterinary Guide. We hope you found it useful and that it provided you with helpful pointers on how to care for the cats in our care. We have put together a short guiz to highlight a few of the key chapters, containing information which some people may be less familiar with.

For your chance to win a month's supply of cat food, kindly donated by PURINA®, simply complete the answers to the short quiz and enter the competition here: www.surveymonkey.co.uk/r/theveterinaryguide

One lucky winner will be selected at random after the closing date of 22 May 2020 and will be notified by

email within five working days. Please note - the prize will be enough food to feed one cat for a month. Winners' details will be passed on to PURINA® for products to be sent direct.

An online version of The Veterinary Guide can be found on the Cats Protection website:

www.cats.org.uk/help-and-advice/information-for-vets/ vet-protocols-and-resources C





# Did you KNOW?

## During 2019 as an organisation we:

 helped 191,000 cats and kittens through our national network of around 230 volunteer-run branches and 36 centres

 found good homes for 41,000 cats, reunited 2,500 and helped many more to stay with their owners by providing advice and support on issues including behavioural problems

 continued to run the largest single species neutering programme in the world; helping neuter 150,000 cats and kittens

 supported around 11,500 volunteers to help cats

Join us





/catsprotection

