

The Behaviour Guide

2021 edition

With grateful thanks to our sponsor for their support in the production of this guide



Chapter one

Introduction

4

Chapter two

Promoting normal	
cat behaviour	1
Understanding cats' needs	1
Development of feline behaviour	1
Kitten socialisation	1
Communication	2
Pheromones	3
How cats learn	3
Essential resources and placement	3
Feral cats	4

Chapter three

Behaviour in the	
rescue environment	44
Essential resources and settling a cat into rescue care	49
Behavioural processes within Cats Protection	54
Cat handling	57

Chapter four

Information for caregivers	62
Cats living together	62
Integration	68
Travelling with cats	70
Indoor and outdoor cats	74
Kitten care	76
Elderly cats	78

Chapter five

Common behavioural	
problems	81
Managing cat behaviour	81
Stress	83
Frustration and depression	86
House soiling	88
Toileting issues	88
Spraying	90
Aggressive behaviour	91
Hiding and avoidance	94
Scratching	96
Despotic cats	98
Other problem behaviours	100
Overgrooming	100
Attention-seeking behaviour	100
Juvenile behaviours	101
Ріса	101
Nocturnal activity	101

Chapter six

Case	studies	1	02

Chapter seven

Glossary	107
References	112
Further reading and Cats Protection resources	113

Introduction

This guide has been written for the Cats Protection network to provide an introduction to cat behaviour. *The Behaviour Guide* is part of a series of informative guides which have been created specifically for Cats Protection users, including *The Welfare Guide*, *The Veterinary Guide* and *The Feral Guide*.

The guide has been written with particular reference to the 'shelter behaviour' approach, however many of the principles covered by the guide can be applied to cats in environments other than rescue. While it is aimed primarily at Cats Protection people, as well as the vet profession that are involved in the care of Cats Protection cats, it is hoped that this guide will also be useful for other animal welfare charities and boarding catteries as well as veterinary, vet nurse, behaviour and animal welfare students and other cat professionals.





What is cat behaviour?

Cats are fascinating animals. Images and videos of domestic cats make up some of the most viewed content on the web. At the heart of our affection for cats lies the pleasure we experience in observing their behaviour and in our interactions with them.

Cat 'behaviour' is defined as the way in which a cat behaves in response to a particular situation in their environment. Behaviour is an external expression influenced by the cat's internal, emotional state at that moment in time. Their relatively recent domestication from an ancestor shared with the African wildcat underpins the natural range of cat behaviours specifically associated to and necessary for a solitary hunter. Despite being emotional animals, they lack some of the emotions specific to humans, which can lead to misunderstandings. You can find out more about normal cat behaviour in the section called 'Understanding cats needs and domestication' in the next chapter.

As well as evolutionary behavioural features that make a cat a cat, an individual cat's behaviour is influenced by inherited genetic factors (nature). A cat's behaviour is also influenced to a great degree by their environment (nurture); most critically environmental factors during the early learning period of kittens from two to seven weeks of age known as the 'socialisation period'. For cats, many of their specific behaviours are influenced by their previous experiences.

The guide is divided into four main sections.

- Promoting normal cat behaviour
- Cat behaviour in the rescue environment
- Information for caregivers
- Common cat behavioural problems

It is not within the scope of this guide to attempt to resolve behavioural problems. Each behaviour case is unique; an evidence based, scientific approach tailored to the individual cat is required. The guide is intended to provide general guidance and where necessary will link to other Cats Protection resources and reliable external information. The aim of this guide is to enhance the knowledge and understanding of basic cat behaviour principles for those people working with cats.



Humans are a predominantly social species. Conversely, cats are a predominantly solitary species. As such, we often find the interpretation of cats' behaviour difficult. Cats live in a much more scent-sensitive world than we do. They use scent to orientate themselves in their environment as well as to detect and hunt prey. Cats also leave signals in the form of scent for the purposes of distant communication with other cats. Cats don't have the ability to display complex visual signals such as facial expressions in the same way that we do as humans; they find visual communication tricky, particularly in times of conflict. As a result, cat fights can escalate quickly and can commonly end with fight wounds and cat bite abscesses.

Misinterpretation of a cat's behaviour can lead to a breakdown in the relationship between owner/carer and cat, and a potentially unrecognised poor quality of life for the cat.

Why is cat behaviour important to Cats Protection?

According to the Cats Protection CATS* report in 2020, there are around 10.8 million owned cats in the UK. Around a quarter of all UK households own at least one cat. Inevitably, with so many cats in the UK, there is a knock-on pressure on rehoming charities.

Around 150,000 cats are reported to enter UK welfare organisations each year. Around one third of these cats are rehomed or reunited by Cats Protection.

Cats are relinquished for a number of reported reasons, including abandonment or straying, a change in owner circumstances, unwanted kittens, or due to human allergies. Among these reasons, it is important to recognise that many cats are relinquished annually due to unwanted feline behaviour. The most common reason for cats to be returned to Cats Protection following adoption is that the cat is not settling, often due to poor integration with the resident cat.

Other behavioural reasons commonly cited include aggressive behaviour towards people or other cats and house soiling, which includes inappropriate toileting and spraying.

Cats Protection's approach to promoting feline behaviour is vitally important; if we can get this right, we can not only improve the welfare of individual cats but also help to reduce the numbers of cats needing to enter rescue care nationwide.

Behavioural problem? Think 'vet check – behaviourist'

The first step in dealing with a behavioural problem is to ensure that the cat undergoes a full health-check by a vet. This is needed to specifically rule out any underlying medical conditions that could have led to the behaviour. Any changes in the cat's normal behaviour need to be discussed with the vet, even if it does not seem directly relevant to the behavioural problem at hand. The health-check needs to take place shortly after the change in behaviour started, even if the cat was deemed healthy at a prior vet visit or at the time of coming into Cats Protection care.

If the vet ascertains that the problem is behavioural, then they may wish to send the cat to see a qualified behaviourist. For owned cats, Cats Protection recommends contacting the Animal Behaviour and Training Council (ABTC) to find a local qualified behaviourist. These behaviourists see behaviour cases when these cases have been referred to them by a vet. They have studied to a high level with relevant experience and adhere to a professional code of ethics in order to meet the requirements of the Animal Behaviour and Training Council.

Cats Protection's centres and branches have access to our very own in-house Behaviour team. Cats Protection's qualified behaviourists are on hand to help with behaviour queries regarding cats in the care of Cats Protection and for those cats recently homed by the charity. The Behaviour team can be contacted at **behaviour@cats.org.uk**

The behaviourist profession

Behaviour counselling for companion animals is a discipline that has been gradually developing and has slowly grown into its own specialist profession. Historically, the work of behaviourists has been largely unregulated and this has resulted in many different and potentially conflicting ideas cropping up within the profession. There is a wide range of different standards of expertise among those currently working in the field. Very few practising behaviourists are affiliated to a professional body or are working to uniform standards of practice. However, the relatively recent introduction of professional standards means that this is set to change.

The Animal Behaviour and Training Council (ABTC) was set up in 2010 and is the regulatory body that represents animal trainers and animal behaviour therapists. It is the only animal welfare charity that is primarily concerned with protecting the psychological welfare of animals. Cats Protection is one of the founding members alongside the Association for the Study of Animal Behaviour (ASAB), the Association of Pet Behaviour Counsellors (APBC) and many major professional organisations in the veterinary, rehoming, behaviour therapy and animal training sectors of the industry.

The ABTC sets and maintains the standards of knowledge and practical skills needed to be an animal trainer, training instructor or animal behaviour therapist. It maintains a national register of appropriately qualified animal trainers and animal behaviourists. The ABTC promotes the welfare of animals in their interactions with humans, lobbying for humane methods in training and behaviour modification, and for the education of the animal owning public.

More information can be found at the ABTC website **www.abtc.org.uk**.

Addressing cat behaviour

The best way to ensure good cat welfare is to allow cats to express their natural behaviours and to meet their needs as a caregiver. Caregivers including owners and animal welfare charities have a duty of care under the Animal Welfare Act (England & Wales) 2006, the Animal Health and Welfare (Scotland) Act 2006 and the Welfare of Animals Act (Northern Ireland) 2011. The Code of Practice for the Welfare of Cats or 'Cat Code' is a practical guide to help caregivers comply with the Act, and lists the 'five welfare needs' of cats.

- The need for a suitable environment
- The need for a suitable diet
- The need to be able to exhibit normal behaviour patterns
- The need to be housed with, or apart from, other animals
- The need to be protected from pain, suffering, injury and disease

Undoubtedly it is in both the cat's and the caregiver's best interests to prevent feline welfare issues and unwanted behaviours developing as a result. Within animal welfare charities, much of the behavioural support needs to focus on prevention rather than addressing problems. Cats find the confined nature of the rescue environment with its close proximity to a number of unfamiliar cats particularly challenging.

As such, there is a limit as to how much can be achieved while the cat is still in the care of the charity. Many cats flourish in their new home once they have adapted and settled in. While we must make every attempt to make each cat's time in rescue care as pleasant as we can, we must also recognise that the key objective is to strive to ensure that their stay with us is as brief as possible.





Promoting normal cat behaviour

Understanding cats' needs

There are behaviours and species-specific needs that are essential to being a cat. In order to understand these needs, it is useful to look at the ethology of the species, or behaviour in their natural environment, and for domesticated species, it is important to explore the needs of the ancestral species. An appreciation for this baseline of their behaviour is crucial as it underpins everything.

More information on our free cat behaviour course Understanding Cats' Needs can be found on our website www.cats.org.uk/help-and-advice/online-learning

Domestication

The domestic cat (Felis catus) has shared ancestry with the African wildcat (Felis silvestris lybica) - a species still found today in the African savannah and Middle-East. They are perfectly adapted to their arid environment and to the life of a solitary hunter. Domestication is likely to have occurred approximately 10,000 years ago as a result of changes in farming practice. Farmers started storing large quantities of grain, which invariably attracted rodents. This concentrated source of prey attracted African wildcats, particularly those that were a little bolder and slightly more tolerant of other wildcats, into human settlements. Other wildcats that were more fearful continued to live and hunt in the savannah which over time led to a divergence in the population - ultimately leading to today's domestic cat and today's African wildcat.





As far back as Ancient Egyptian times, humans have valued cats for their rodent control abilities. As a result, cats have been left to their own devices to breed with little interference from humans for thousands of years. Cats have only been selectively bred for appearance and temperament for about 200 years. Domestic cats have not changed as significantly as dogs from their ancestor, which explains why it is helpful to look at African wildcat behaviour.

Solitary

Like their ancestors, domestic cats still have an inherent desire to maintain an independent territory and are generally happy to live without other cats for company. In fact, many cats living together under the same roof only tolerate the presence of others to gain access to valued resources (eg food). This can result in anxiety and chronic stress, which is not always obvious – especially as cats often spend time together to access the resource. Some cats may choose another cat as a companion, but this is specific to the individuals concerned and not necessarily generalised to be social with all cats. Overall, cats need to be able to maintain an independent lifestyle if they wish and have enough separate resources in each of their territories.

Hunting

African wildcats hunt alone, spending several hours a day meeting their nutritional needs. Not every attempt is successful so they will hunt before they are hungry to ensure sufficient food is caught each day. They eat many small-sized prey items, such as rodents, per day, each providing a small amount of energy. On average, their hunting success is only approximately one in four. This would equate to 40 hunting trips per day resulting in about 10 prey items. They are crepuscular (most active at dawn and dusk) which is when their prey is most active.

Because hunting is not hunger-driven, domestic cats are still highly motivated to hunt and have a need to perform successful 'kills' to avoid frustration and release endorphins (feel good chemicals). They are drawn to movement, so interactive play with toys that mimic their prey helps cats to exhibit this natural behaviour and may reduce the desire to seek out such behaviour elsewhere. Feeding enrichment toys can be gradually introduced to provide cats with mental stimulation to 'hunt' for their food, while also facilitating their need to eat little and often.

Communication

Having evolved from a solitary species that doesn't need to communicate with others on a regular basis, cats haven't developed the complex facial muscles required to make a variety of facial expressions. Instead, they use chemical communication to provide long lasting olfactory (scent) and pheromone messages, allowing them to communicate with other cats remotely. These messages, left by rubbing, spraying urine and scratching, enable them to maintain a territory without coming into direct conflict, minimising the risk of injury or disease transmission. Cats that live in the same social group, will maintain their bond by keeping a common 'scent profile' through frequent rubbing sessions. Whereas African wildcats are seldom vocal, domestic cats differ in that they have learned to interact with people using various miaows and chirrups as these are reinforced by their owners by responding positively with affection or food.

Avoiding stress and conflict

African wildcats are small predators and rely on staying fit for survival. As a solitary animal, they cannot depend on others in their group to hunt for them if they are injured. They would much rather avoid conflict by running, climbing or hiding than staying to fight.

When domestic cats feel stressed, they endeavour to use the same strategy as their ancestors. Providing them with places to hide or get up high can help them to cope with stressful situations. Often when cats show aggressive behaviour, it can be because they are stressed or fearful but do not have the option to flee, so are forced to fight.

Cats actively avoid confrontations with other cats by time-sharing their environment, such as a favourite sofa or patrolling the outside territory at different times. Cats also lack appeasement signals to be able to diffuse conflict, which is why they can end up in a 'face-off' with one another.

Sleeping

African wildcats need plenty of sleep to allow their energy reserves to be replenished, enabling them to hunt whenever they detect prey. They will look for a safe place within their territory and rotate the spot to help keep parasite levels low. They often scratch when they wake up to stretch their muscles and to maintain their claws.

Although domestic cats have owners to provide their food for them, instinct still tells them to conserve energy to ensure survival. They will also rotate their sleeping place, just like African wildcats. A Hide & Sleep® box by Cats Protection gives them a choice of sleeping places. It is a good idea to provide cats with a scratching post next to their sleeping area. If it is appropriate for use (tall enough for cats to stretch to full height and sturdy enough for them to lean into), and in the correct location, it is likely they will use this for scratching, rather than furniture or carpet!

Toileting

Toileting is a vulnerable activity for an African wildcat, so they choose a safe and private location within their territory. They steer clear of toileting near to areas in which they eat and drink to avoid contamination of their food and water. They bury their deposits in the sand of the savannah, maybe to elude detection by prey or potential predators.

Domestic cats also prefer to toilet in a safe and private location, away from their food and water source. In the home environment, cats generally like a fine sandy substrate that mimics their natural savannah environment with enough depth to be able to bury their deposits.

Drinking

African wildcats prefer to drink from a moving water source rather than a stagnant pool. They will drink in an alternative location to sites of eating and toileting to avoid contamination from gut contents of prey, or their own faeces. As desert animals, they have evolved to survive without drinking a large amount.

Domestic cats often also prefer moving water, and will often drink more if their water source is away from their food source and toileting area. Cats generally prefer wide-brimmed ceramic or glass containers that don't touch the whiskers. Plastic bowls can sometimes taint the water.

Good cat welfare!

By applying an understanding of cats' origins combined with the five welfare needs, we can ensure a positive mental and physical wellbeing is experienced by the cat.



Development of feline behaviour

What shapes a cat's behaviour? This is the classic nature vs nurture debate. Is it what they are born with (innate behaviours) or everything that happens after they are born and shaped by the environment they live in (acquired behaviour)? The simple answer is that it is both as all behaviour patterns are influenced by both genes and the environment. There is a complex interplay between innate and acquired behaviours.

Behaviour of an individual cat

Cat ethology

In order to understand why animals behave the way they do, it is important to consider the way they behave in their natural environment. This is called 'ethology' and provides the key to understanding the reason for their perceived strange behaviour. In the case of domesticated animals, it is useful to observe the behaviour of the wild equivalent, or any wild animal, which shares a common evolutionary ancestry.

Domestic cats share similar ancestry with the African wildcat as described in the previous section. By looking at the wildcats, the actions of our domesticated pets start to make sense.

For example, many owners wonder why their cat scratches the furniture. It seems like a pointless act. However, if we consider the African wildcat, we can see that scratching is a method of communication by depositing pheromones from scent glands between their toes as well as a visual marker from the vertical scratched lines. This behaviour has not changed during the domestication process and is used by our pet cats for the same reason.

Prenatal influences on behaviour

Before a kitten is born, their 'personality' is influenced by the emotional state of their mother during her pregnancy. If a pregnant queen is subjected to stress (such as a feral cat subjected to confinement, eg in a pen) then her offspring will be born with a greater likelihood of finding everyday life far more stressful than kittens born to a queen who is confident and comfortable in a domestic setting. This is known as prenatal influence.

Kittens can inherit genetic influences from both their mother and father. Studies show that the trait of boldness or confidence and friendliness is inherited from the father. When a queen is in season, she may be mated by more than one tom cat, and this can result in a litter of kittens having different fathers to one another. The consequence of having different fathers can be both different coat colours and varying levels of boldness that contribute to the kittens' personalities. Breed differences will affect their behaviour both in terms of normal behaviour eg Siamese cats are renowned for being vocal, as well as having differing behavioural problems if their needs are not met. Bengal cats are a recent breed of cat that have Asian leopard cat in their hybrid genetic make-up. Anecdotally, these cats are often particularly territorial and have a strong urge to hunt. Their wild ways means they do not cope particularly well in confinement, which can result in behavioural problems.

Both prenatal stress and genetics (eg a fearful feral mother and/or father) are important considerations when deciding whether or not to socialise very young feral kittens, as kitten socialisation (in the first two months of life) alone is not enough to shape the kittens' behaviour completely.

Innate behaviours in newborn kittens

Innate behaviours are those that are present from birth. The suckling reflex is present at birth and can be stimulated through small objects in the mouth, which is strongest after awakening. The rooting reflex to burrow into a warm object is present from birth (queen or littermates usually) in order to find the queen's teat. Both the rooting reflex and the suckling reflex are important behaviours to enable the kittens to feed successfully. Physical contact with the queen has a calming effect on the kittens and they will bury their heads in her fur after a period of separation.

Some behaviours are specific to kittens (ie suckling) whereas other behaviours develop later, such as sexual behaviour. Kittens are able to purr almost from birth and primarily purr when they are suckling. It's a form of communication with the mother that all is well. Hunting behaviour is another example of an innate behaviour, so even lone hand-rear kittens will still have the ability to hunt.

Sensitive periods for learning

The experiences kittens have within their first two months of life are important in influencing their behaviour into adulthood. Scientific research shows that a kitten's socialisation period is between two and seven weeks of age. Kittens learn what aspects of their environment are 'normal' and 'safe'. Everything that they come across during this period is then likely to be accepted as something that is 'OK' later in life. This normally happens in the safe, core environment of the nest. Anything that they do not come across during this period is much more likely to cause a fearful reaction in adulthood. See 'Kitten socialisation' for more information.

Development of play

Play behaviour starts at two weeks of age as kittens try to bat moving objects, but play behaviour is especially common at four to five weeks of age. The functions of play include:

- physical fitness
- mental stimulation
- helping the kitten become more independent
- practising behaviours such as hunting skills
- aiding eye-paw coordination
- learning social behaviours such as bite inhibition
- enabling them to explore their environment

It is important to provide toys for kittens that simulate different types of play whereby the games simulate prey behaviour, for example, using a ball, a scrunched up piece of paper or fishing rod toys. Games of 'mouse' involve moving a toy quickly along the floor and hiding the toy behind items of furniture, whereas bird or moth-style games can be simulated by waving a fishing rod toy in the air. A single kitten may also benefit from being given a kitten-sized soft toy to play a game of 'rabbit' (normally directed towards littermates) whereby they can grab the toy with their mouth and front paws while 'bunny kicking' the lower portion of the toy with their back legs.

Learned behaviour

Kittens learn a great deal from their siblings and the queen. Through play behaviour with their siblings and/ or the queen, they learn 'bite inhibition' over time when play has become too rough. Bite inhibition helps to establish boundaries and normal levels of interaction with others. Kittens are especially receptive to learning what is considered normal behaviour when they are young, which is why it is so important that they are not played with using fingers and toes, otherwise they may learn that this is a normal way to interact with people.

During weaning, kittens learn to deal with frustration as the queen progressively removes herself away from them or lies on her stomach to prevent access to her teats, the kittens in turn will be more actively trying to suckle. While hunting is an innate behaviour, prey preferences are influenced by whatever prey the mother brings back to the nest. Queens do not necessarily actively 'teach' the kittens how to hunt, but rather set up opportunities (usually with half dead prey) for the kittens to practice using their natural instincts. For these reasons, kittens should stay with the queen until they are at least eight weeks old.

Medical conditions

A cat's behaviour can be affected by an underlying medical condition. For example, a cat showing aggressive behaviour could be in pain, which is why it is crucial to rule out medical causes first with an examination by the vet. See 'Managing cat behaviour' for more information.

Previous experience

This can be positive and/or negative! Sometimes we don't know the background of rescue cats if they are a stray. By asking owners to provide as much information as possible about their cat prior to relinquishment, the rescue organisation is better equipped to provide for that cat's welfare. Intake or cat profile questionnaires provide a structured framework to enable the collection of consistent information.

Current environment

Cats need essential resources that are accessible (eg food, water, toilet, beds, places to hide, places to get up high, scratch post, toys, escape routes). It is important to consider whether there are any potential threats from the cat's point of view.

Pulling it all together

Overall it is important to consider all of these factors when trying to understand cat behaviour, including how they may play a role in behavioural problems. For example, a cat showing hiding behaviour may have an underlying medical problem that could cause the cat to hide more. This would need to be ruled out first. Developmental factors, such as the cat having had a fearful father or a mother that had a stressful pregnancy could contribute to a cat showing a fear response. Poor or no socialisation during the socialisation period could also result in a cat being more likely to show a fear response. The cat's current environment should always be considered to ensure that there isn't anything that could cause stress or conflict. Cats need their resources to be easily accessible in order to feel in control and secure.









Kitten socialisation

Preparing a kitten to cope with the challenges they will be faced with throughout life is one of the most important ways to ensure their lifelong welfare. It should be an essential part of routine daily kitten care, and not seen as an added extra. Kittens raised within an animal welfare charity setting experience a very different environment to the one they will encounter once adopted, and without careful consideration of their development and socialisation, they may develop into adult cats which struggle to cope within a normal domestic setting.

Kittens which have been adequately prepared for the domestic environment will be far less likely to experience high levels of stress or develop behaviour problems as an adult. For example, kittens given two or more types of cat litter are more likely to be adaptable and cope with a change of litter in the future, which can help to prevent toileting outside of the litter tray.

Socialisation period

The socialisation period is the crucial period of time in a kitten's life between two and seven weeks of age when the kitten's brain and sensory system are still developing and the stimuli they encounter influence how this development occurs. The different aspects of their environment, and experiences they have during this period (for example with people, dogs or the noise of a washing machine) teach them whether it is threatening or non-threatening. It is important to teach pet kittens how to interact with people by providing kittens with appropriate toys such as ping pong balls and toy mice, and not encouraging kittens to play with fingers or other body parts. Positive experiences with different people and household sounds will teach a kitten that it is non-threatening. However negative experiences or no experiences at all can cause a kitten to become fearful into adulthood (see 'Feral cats' section for more information).

As a species, the domestic cat does not have an inbuilt 'need' or requirement to be with or live with people. A cat's ability to tolerate the presence of contact with people and desire to seek out that contact is a learned behaviour developed during the socialisation period. If a cat is to be a confident, happy cat when homed, positive experiences and handling by a variety of different people during this time is essential.

Feral kittens

The onset of a fear response or hazard avoidance response in kittens begins by six weeks of age. It is extremely difficult to socialise kittens that have had no human contact after they are weaned and almost impossible after they have reached sexual maturity. Socialisation is more likely to be successful if it begins at a younger age and before the onset of fear responses. Socialising feral kittens is much more resource intensive than socialising domestic pet kittens, and needs to be done carefully to avoid overwhelming or stimulus flooding the kitten, which can seriously compromise their welfare. While feral kittens under eight weeks of age that are brought into a home environment can become socialised with people, it is worth bearing in mind that both the kitten's genetic influence from the parents and the kitten's learnt responses before coming into human contact will play a role in the friendliness of the kitten into adulthood. Poorly socialised kittens that are placed into the domestic environment as a pet can suffer ongoing stress due to their persistent fearfulness around people. Due consideration is needed as to whether the kitten is sufficiently socialised enough to cope with life in a domestic household. Insufficient socialisation to such a setting is not fair on the kitten or the new owners. Desensitisation programmes are not effective on cats that were poorly socialised as kittens.

In the interest of welfare, it is best that feral kittens found at eight weeks old or over are trapped, neutered and returned to their colony or original territory as this is the environment that they are born into and familiar with.

For Cats Protection branches and centres, please contact the Behaviour team about specific cases if you need advice and support. For more information, see *The Feral Guide*.

Week beginning:	
2-8 WEEKS	
N CHART:	
SOCIALISATIO	



O-T · INIVIA NOIVOITANA			NACE F
Litter ID:	Age on admission: Origin (Origin of litter: home/feral/unknown	PROTECTION
Meek 2 3 4 5 6 7 8	Week 2 3 4 5 6 7 8	Week 2 3 4 5 6	× ×
Gentle Handling			F
Beetrained in hand	Female handler 1	Flavour 1	
Hold head	Female handler 2	Flavour 2	
Dook in ears	Male handler	Flavour 3	
e Examine neck area	Other handler	Flavour 4	
Stroke head, neck, back and tail	Elderly person handler		
Touch paws and legs	Toddler (2-5 years)	FOOD TYPES	
Lifted up and held	Older child (5-12 years)	Cloth smelling of dog	
Collar put on and removed	Teenager	Cloth smelling of cat (relaxed vaccinated cat)	
Open mouth and examine		Cloth smelling of rabbit	
Turn over and stroke belly	SOUNDS	Cloth smelling of a baby	
Lift tail and look under	Radio - music station		
Examine paws	Radio - 'talk' station	TOYS	
Kept apart from littermates for 2 minutes		Cardboard box	
Placed into cat carrier	Aerosol spray (at a distance)	Balls/cotton reels	
Taken in cat carrier into car/van	People shouting	Empty plastic bottle	
Groom with coff bruch		Furry toy (eg 'mouse')	
	LITTER TRAY	Toy with bell	
dently restrained on table	Clumping type litter		
	Wood-chip type litter	ACTIVITIES	
SURFACES TO WALK ON	Soil, peat or sand	Played with string/toy on string	
Shiny surface (eg glass)	Scented litter	Recall for a food treat using	
Tiles or lino surface			
Rough surface (eg stones)		OTHER PETS	F
Carpet	Bark	Contact with friendly, calm dog	
_	Cardboard	Visual contact with calm adult	
CREDIT: DR RACHEL CASEY AND CATS PROTECTION	0 String	cat in cat carrier	





Ensuring healthy kittens

Before beginning to socialise a litter, an understanding of feline infectious disease transmission and appropriate strict hygiene measures to counteract this are crucial in order to ensure good health and welfare as kittens are particularly vulnerable. In the rescue environment where there are commonly a large number of different litters, originating from a variety of sources and therefore unknown disease risk and carrier status, this is especially vital. Infectious disease control measures include consistently washing hands before and after handling sessions with an appropriate antibacterial skin disinfectant, wearing disposable personal protective equipment (PPE) such as disposable gloves, aprons and shoe covers to protect transmission from fomites, ie clothing and footwear, and only handling one litter per handling session to prevent infectious disease spread between litters.

Considerations during socialisation

Prior to starting kitten socialisation, time should be spent gaining the trust of the queen and being mindful of her emotional state. Some queens may be more maternally protective of their kittens than others, and all handlers should be made aware of the possibility of maternal aggression. Expert behavioural advice should be sought for socialised but anxious queens.

It is important that handling of the kittens is positive, so the handler needs to respond promptly according to each individual kitten's reaction to socialisation experiences. Handling kittens that are showing signs of distress, such as crying or struggling, in the hope that they will get used to the experience, is in danger of 'flooding' them and likely to make negative associations with people (see 'Hiding and avoidance' section for more information about 'flooding').

Kitten socialisation programme

Being born into and/or raised in a rescue setting can present a unique challenge as the 'unusual' environment (compared with the 'usual' domestic setting) may be considered 'normal' by these kittens. Cats Protection has a structured kitten socialisation programme developed by Dr Rachel Casey to address these challenges and prepare kittens with a variety of experiences they may encounter later in life. The programme introduces and repeats various stimuli throughout the socialisation period of the kitten, which is recorded on a chart. The socialisation chart is a brilliant tool with lots of tick boxes to ensure that a kitten is provided with the essential positive experiences in order to cope with life as an adult cat. Using one chart per litter can help to keep track, particularly where caregivers are looking after multiple litters. The socialisation experiences can be easily incorporated into day to day care for ease. For example, giving a kitten weight check could be a good opportunity to introduce the kitten to a cat carrier (to transport them to the weighing scales), and perform some basic health check handling such as touching ears and paws.



Habituation to household stimuli

Whereas 'socialisation' generally refers to animals getting used to people and/or other animals – also known as 'animate stimuli' – another essential aspect is habituating the kittens to a variety of novel objects (those that they haven't come across before) and household sounds – also known as 'inanimate stimuli'. This essentially means getting the kittens used to different parts of their environment which should be considered non-threatening by the individual kitten. Experiences that involve all the kitten's senses are extremely important to the cat and can often be overlooked by us as humans.

A very well-socialised cat is much less likely to feel stressed by novelty and cope with normal daily life in the home environment, and so socialisation has a huge impact on an individual cat's lifelong welfare. See the 'Kitten care' section for more information about kittens.

For more information, check out the Cats Protection website which includes our free kitten socialisation sounds and Cats Protection kitten socialisation chart – www.cats.org.uk/kitten-socialisation

Also look at the Kitten Checklist by The Cat Group and supported by many animal welfare organisations to help owners choose a healthy, friendly kitten – www.cats.org.uk/media/3722/the-kitten-checklist.pdf

Body Language of Feline Anxiety







Major crouching

More Subtle Signs of Fear & Anxiety



Dilated Eyes



Ears Turned Back, **Furrowed Brow**



Laying on Side, **Tail Flicking**



Staring, Focused on Object



Looks Half Asleep







Hair Raised, Staring, **Ears Turned Back**



CATTLEDOG PUBLISHING

A PART OF THE VIN FAMILY

drsophiayin.c

Suddenly Grooming, Excessive Grooming

©2020 Veterinary Information Network

For additional Low Stress Handling* information, posters, flyers, books, and DVDs, please visit our website at http://DrSophiaYin.com.

Walking with Flat Back,

Tail Down, Head Down

Questions@cattledogpublishing.com (530) 757-2383

777 W Covell Blvd #100, Davis, CA 95616

Support@lowstresshandling.com



Hiding,

Communication

Communication is an essential skill for any species, whether they are an extremely social species, or a solitary species like the domestic cat. As humans, we often think of communication in terms of speaking or vocalisation. While vocalisation is one way in which cats communicate, it's important to understand their other forms of communication.

Cats primarily communicate with each other through scent and pheromones, as they descend from a solitary species which would rarely come in to contact with each other in the wild. It is possible to think of cats using scent like leaving messages or sign posts in certain areas to warn others but also themselves. However, cats are still very capable of communicating with their owners, but unfortunately it is often the human lack of understanding which can cause issues.



Body language

Body language is a useful indicator of the emotional state or mood of a cat. However, it is important to look at the cat as a whole as one posture or behaviour may be used in various situations and mean something entirely different. For example, when a cat arches its back, one interpretation could be that the cat is feeling threatened. However, cats may also arch their backs when greeting their owner. This is why it is important to view all behavioural signs collectively and not in isolation. Body language, facial expression and the context all need to be taken into account.

Another good example of a common posture that can have multiple interpretations is a cat crouched down low with all four paws tucked under them and tense muscles. Depending on the context, it could be that the cat is crouched in a hunting pose ready to pounce on a toy or prey. This would be combined with dilated pupils, a gaze concentrated in the direction of the toy or prey and rapidly switching body weight between the hind legs just before pouncing. However in other contexts, for example when the cat is faced with something they perceive as threatening, a cat in the crouch posture could be considered to be in a negative emotional state, which may be due to stress or pain or even both. A cat in this position is likely to be feeling vulnerable, as having all four paws tucked under them with tense muscles means they are easily able to run if need be. This posture also ensures all of their limbs, which are essential to their survival, are safely tucked away.

Laying on their back and being stretched out is a posture seen in a very relaxed cat, often exposing their vulnerable stomach area. Many cats will do this as a greeting behaviour. Unfortunately, people often make the mistake of giving the cat a 'tummy rub', which can sometimes result in a scratch or a bite. While there may be a very small number of cats that enjoy this, most are merely tolerating it or dislike it.

The cat's tail position can also be a source of confusion for many people. We often associate a wagging tail in dogs to mean a feeling of happiness and excitement (although this is not always the case), but this usually means something different in cats. A cat's tail can be used in part to recognise whether the cat is showing a greeting behaviour or is feeling agitated, threatened or indecisive. For example, a faster moving tail which appears more erratic can indicate a cat is feeling agitated or highly aroused, and should not be touched. See cat body language video resources in 'References, further reading and Cats Protection resources' section.



Facial expressions

Cats are often described as acting 'out of the blue' or 'without warning'; however this is seldom the case and facial expressions can help with understanding their behaviour. Cats do have far fewer facial muscles than humans or dogs, but their faces can tell us a surprising amount about their emotional state. The issue is often that their facial expressions can be rather subtle and quick; we just need to be vigilant and learn how to read them.



Cats have amazing hearing and they are able to rotate and move their ears in a range of ways. This also means by looking at how a cat's ears are positioned, we can gain some understanding of how they are feeling.

Ears facing forwards are usually seen in a calm and relaxed cat and could be considered the 'neutral' position. However, a cat may be alerted to something causing their ears to be facing forward so their entire body language and behaviour should be considered as well. Cats showing offensive aggression towards other cats, where they may be trying to block resources, may also have their ears facing forwards, but it is likely to be combined with staring. Often it is the behaviour of the other cat which is useful to give an indication of whether the interaction is amicable or not. If the ears are turned out to the sides or twitching, this could indicate a cat that is feeling nervous or perhaps interested, moving the ears to try and gain as much information from the environment as possible. Ears which are flattened can indicate fear and anxiety, whereas ears which are rotated back can indicate frustration. The difficulty comes, however, when cats experience both fear and frustration at the same time. A cat that is preparing for conflict is likely to have their ears flattened in order to protect them from a possible injury and should not be touched.





Eyes

Similarly to cats' ears, their eyes, or more specifically their pupils can either dilate (get bigger) or constrict (get smaller) to let more or less light in order to gain more information about their environment. This means that a cat with large, dilated pupils may be feeling vulnerable or stressed, but it could also be because they are aroused or hunting. The context is extremely important to consider, as low light levels will also cause a cat's eyes to become dilated but may not necessarily mean that a cat is stressed or aroused. Cats that are resting and feeling relaxed will often have half-closed eyes. However, cats may also appear to squint which could indicate that they are experiencing pain or are feeling uncomfortable.

Cats will usually try to avoid eye contact, as maintaining eye contact both between other cats, and between cats and humans, is considered confrontational. Cats will often look away from a person when they look at them; it's not the cat being 'rude', but quite the opposite. The 'slow blink' can be commonly observed, where the cat will slowly close their eyes to show another cat or person that they feel relaxed. The slow blink can also be repeated back to the cat to show the same meaning, and it is likely to reinforce the behaviour too. In contrast, a repetition of several fast blinks in a row could indicate fear, anxiety or stress.

Vocalisation

In the wild, cats are not naturally vocal which is testament to their solitary nature. Vocalisation is often limited to interactions between a queen and her kittens, and calling for a mate, for example. Domestic cats differ to their wild counterparts in that they have learned to be vocal with people. Cats learn that they can get a response from an owner by miaowing. Over time, owners and their cats can build up a mutual understanding whereby cats develop a repertoire of individual miaows which have a specific meaning to their owner. Some vocalisation is quite easy to understand in general terms, such as most people will be aware that when a cat hisses, they are feeling unhappy or threatened and is warning that they may attack if necessary. There are some cats that never actually learn to vocalise in this way, whereas other cats are very vocal, particularly oriental cat breeds.

Purring is usually associated with a cat that is feeling content, relaxed or happy. They purr in situations such as subtle communication between a gueen and her kittens, or positive interaction with other cats. Scientists have also identified a solicitation purr, which sounds more urgent and is hard for owners to ignore. They may use it in the context of wanting to be fed or attention. It has a high frequency described as a 'cry' embedded within it and sounds more vocal than the average purr. While this is generally the case, purring can also be a sign that a cat is in pain and it tends to sound more rapid in these circumstances compared to the slower, rhythmic purring of a content cat. Unfortunately, the way in which cats purr for either contentment or pain sound extremely similar and so the rest of the cat's body language, behaviour and context should be observed for any concerns.

While vocalisation varies between cats, excessive or increased vocalisation can indicate that there is a potential medical or behavioural problem, requiring the cat to be taken for a health-check at the vets. If medical reasons are ruled out, then a referral to a qualified ABTC registered behaviourist can help to explore the underlying behavioural reasons.

Emotions

Cats can feel a variety of emotions including happiness or joy, relief, fear, anxiety, frustration, depression, attachment loss (referring to feeling of loss sense of security) and an emotional response to pain. While it is important to avoid being anthropomorphic (attributing human emotions to animals) when looking at cats and their welfare, it is also crucial to understand the emotions that cats can feel, and when they might feel them to ensure that we are able to meet the individual needs of cats.

Cats are often labelled as 'evil' or 'spiteful', with many owners feeling their cats seek revenge for an earlier experience, by toileting outside of the litter tray or by showing aggressive behaviour. However, cats do not possess the capacity to seek revenge or to purposefully annoy a person. They also don't feel jealousy, guilt, remorse, possessiveness or dominance. As far as science can tell us, cats live in the present, and do not have the cognitive capacity required to be able to plan for the future. Additionally, cats do not possess a sense of right and wrong, and certainly do not understand what an owner considers to be 'the correct way to behave'. Sadly these beliefs can lead an owner to miss a serious medical or behavioural problem.

While boredom is considered a state rather than an emotion, it is important to understand the role it can play in a cat's behaviour and wellbeing. Cats lacking mental and physical stimulation will quickly become bored. Boredom, particularly over a long period of time, can eventually cause stereotypical and compulsive behaviours such as overgrooming. Boredom can also lead to frustration and eventually depression. Unfortunately, frustrated cats often begin to show aggressive behaviours, which is common in the rescue environment due to a lack of stimulation. By mentally stimulating cats with toys, interactive play sessions and feeding enrichment we can prevent boredom and reduce frustration.

Fear is an emotion seen frequently in cats. Poorly socialised cats are more likely to show fearful behaviour at novel experiences, or to people if they were not wellsocialised between two to seven weeks.

Of course, cats are able to feel positive emotions too, such as pleasure, relief, joy and excitement. To ensure good welfare, every effort should be made to elicit positive emotions and prevent or reduce negative emotions, such as fear and frustration.

Human and cat interactions

When interacting with any cat, it is crucial to be mindful of a cat's mental state, as well as their body language and behaviour in order to avoid causing stress, and reducing the risk of injury. In general, it is best to allow cats to initiate contact with people. If a cat is scared or fearful, contact should not be forced unless necessary, for example when undergoing urgent veterinary treatment.

When approaching a cat, avoid direct eye contact and approach slowly and in a predictable manner. Presenting a hand towards the cat, but not directly in the cat's face, will allow them to approach and potentially sniff or rub your hand, initiating the interaction. If the cat moves away, allow them to do so and avoid pursuing them, as they are not comfortable with the interaction.





Care should be taken to be gentle when handling any cat, and 'less is more, four paws on the floor' is a very relevant phrase. It is of the utmost importance to consider the effect of 'learning theory' during interactions or think about what the cat is actually learning during each handling situation as this will affect the cat's emotional state and therefore their behaviour in future interactions. More forceful methods of handling can quickly cause significant stress for the cat and increase the chance of injury to the handler, which risks the cat learning to use progressively more aggressive behaviour in response. 'Scruffing' or restraining a cat by the scruff of their neck, is an unnecessary method of restraint, and should be avoided. It can cause the experience to be extremely negative for the cat, causing additional stress, anxiety around similar situations and a more adverse reaction to being handled in the future.

Anthropomorphism

Anthropomorphism is the attribution of human characteristics, emotions or motivations to animals, as well as gods and inanimate objects. It is a natural human tendency, and is extremely common, but it can cause misunderstanding especially when dealing with an animal's unwanted behaviour. For example, owners often believe that their pets have toileted inside the house out of 'spite' or 'revenge', and the pet knows they have been 'naughty'. By making this assumption, the real reason for this unwanted behaviour is missed and a solution is not found, often resulting in the behaviour continuing. If we are to address such behaviours, we must understand that cats have different needs and motivations to humans, and they have their own unique way of viewing the world. Anthropomorphism is rife in the media. Cartoons, feature films and even memes and YouTube clips show animals behaving in a human-like way. It is unhelpful and encourages the tendency to misinterpret an animal's behaviour, to the detriment of their welfare.

Dressing cats up in clothing is another form of anthropomorphism eg Santa hats, outfits, jewellery and glasses. Clothing should only be used on the medical advice of a vet and with the relevant explanation given, for example to cover and protect a wound while healing.

In general, clothing for cats is not appropriate as it restricts the cat's movement and ability to show natural behaviour. It can also cause negative emotions like frustration, fear and anxiety. Even if a cat doesn't appear to react, this doesn't mean that the cat is 'not bothered or coping with it well' as the cat may be showing behavioural suppression or inhibition. For example, people using compression vests or wraps on cats often comment that the cat 'seemed fine and just lay down'. The use of a cat-sized compression vest (which are designed with the intention of providing pressure as a method of trying to calm stressed cats) may just immobilise them without decreasing their anxiety, and the lack of obvious response could simply be behavioural inhibition. There is currently no scientific evidence that they are effective in cats. Additionally, getting the cat to wear it can be difficult and stressful in itself, and there is the potential for the handler to be injured in the process. Other stress reducing methods should be used instead and the use of such compression vests is not recommended. See 'Stress' for more information.

However, there are occasions when using anthropomorphism can be useful. Certainly cats are emotional, sentient animals, so it would be wrong to say that they don't have any emotions. They feel anxiety, fear, frustration, depression, attachment loss (the loss of security), happiness or joy, relief and have an emotional response to pain. So if people feel pain from a wound and require pain relief, an animal with a wound is also likely to feel pain and require pain relief too. Anthropomorphism encourages compassion and empathy towards animals and can be useful at times when trying to explain a situation from a cat's perspective. But, in general, when considering animal behaviour, it is important to consider animals from their species-specific perspective and needs.

Considering cat welfare first – filming and photography

In images and videos of cats, the inappropriate use of anthropomorphism should be avoided. The way cats are portrayed should accurately reflect their species-specific emotions so as to promote a better understanding of their needs. Above all when filming or photographing cats, it is essential to put cat welfare first.

In the first instance, it should be questioned whether this is necessary or whether an alternative format could be used, eg an animation. Using cats for filming and photography purposes can be very stressful for them. Filming and photo shoots often present challenges and unfamiliar and unnatural stimuli such as bright, hot lighting, unfamiliar filming locations or studios, unfamiliar people, noise, smells, as well as being expected to perform behaviours on human terms. This can have adverse effects, such as frustration, anxiety and/or fear, and the ethics of using cats, even 'actor' cats which are trained, should be questioned.





Pheromones

Chemical signals

Pheromones are chemical substances that seem to transmit highly specific information between animals of the same species. Pheromones appear to effect changes in the brain to alter the emotional state of an animal. Pheromones pass through the incisive ducts to the vomeronasal organ (VNO) where it binds to receptors. Receptor activation results in signals being sent to the vomeronasal bulb (also known as the accessory olfactory bulb) and then onto the amygdala, some of the limbic system and the hypothalamus.

Cats have a particularly well-developed system of chemical communication and recognise members of their social group or enemies by both their appearance and by their scent profile. Each cat has its own particular profile, which is contributed to by pheromones released by glands in the skin at the corners of the mouth, sides of the forehead, along the tail, mammary region and foot pads. Cats will leave pheromones from their paws and may rub or 'bunt' their faces against objects, people, familiar dogs and other cats to mark their area or share scent. Some pheromones will create a sense of calm and familiarisation; whereas some pheromones may signal that a threat is present. Cats leave pheromones in their environment which can then form a group profile to identify members of the cat's particular social group. Members who go missing from the group may initially be rejected until they have the 'right' profile again. This is why it can be useful in multi-cat households to rub a recently absent feline family member with a towel that has been rubbed over the other cat members of the family. The fact the cat has the 'right' profile can speed their acceptance back into the group. This approach should not be used for new cat-to-cat introductions though (See 'Integration' for more information).

FELIWAY[®] (Ceva Animal Health)

Five facial pheromones have been isolated from cats, referred to as F1 to F5. Cats deposit the F3 fraction on prominent objects (including humans) by rubbing against the object when the cat feels safe and at ease. FELIWAY[®] Classic (Ceva Animal Health) is a synthetic analogue of the F3 facial pheromone fraction. It has been developed to decrease anxiety and to have a calming effect on cats, particularly when cats are reacting to changes in their environment – moving to a new home, new pets and changes in the household for example. In an environment which may be perceived by the cat as uncertain or threatening, FELIWAY® Classic can be used as a way of communicating to the cat that the environment is less adverse than it may seem. It is the only feline pheromone product available as either a plug-in diffuser or a spray, whereas the others are presented just as a diffuser.

A product known as FELIWAY[®] *Friends* (Ceva Animal Health) has been developed. This is a synthetic copy of a pheromone produced in the mammary region of nursing queens. This pheromone is commonly known as 'cat appeasing pheromone' and promotes a bond between a mother cat and her kittens. FELIWAY[®] *Friends* may be useful in reducing tension in a multicat household where the resident cats were previously bonded to one another but are now experiencing conflict.

More recently, 3D modelling of the vomeronasal receptor site, known as V1R9, and its structure has led to the understanding of the major binding site. This site is capable of binding with pheromone compounds, which is more complex than previously thought and therefore delivering a more complex message to the cat. As a result, a new pheromone complex product called FELIWAY® *Optimum* (Ceva Animal Health) has been developed which provides cats with a message of 'enhanced serenity', helping cats to feel more secure in their home by providing reassurance as well as harmony between cats living together.

In terms of practical application, pheromone diffusers should be plugged in where the cat spends most of their time and left on for continuous use for the duration marked on the packaging (commonly about 30 days). It covers about 70m² and takes about 24 hours for the diffuser to be fully functional and it should not be turned off (eg at night) as the wick cools and heats up when turned off and on again, which can smell off-putting to the cat. Diffusers should be able to diffuse freely and therefore should not be plugged in under furniture or shelves etc, which can reduce the efficacy and leave an oily residue. For this reason, they should also not be used in IP rated sockets with flaps, commonly used in rescues and boarding catteries. Equally, the flaps should not be removed from the sockets as this reduces this efficacy of the sockets in terms of health and safety. In these situations, it is better to use FELIWAY[®] *Classic* spray on a clean cloth, and then add it into the cat's pen or foster room after 15 minutes (to allow the alcohol carrier to evaporate).

Pheromone therapy on its own cannot remove all anxiety. Pheromones are used as an adjunct to additional measures such as modifying the environment and implementing controlled desensitisation programmes. A full behavioural assessment should be made for each specific case once medical reasons have been ruled out. As with all treatment, if pheromones are not used appropriately then the desired result will not be seen. Advice from a behaviourist and vet will help to identify how best to use pheromones in addition to other measures when managing a specific behavioural condition.





How cats learn

Having an understanding of how animals learn is paramount to understanding their behaviour. It underpins both normal and problematic behaviour, and helps us appreciate how their underlying emotions play a role in motivation. In order to recognise why cats do the things they do, it is vital to understand how they form associations. How cats learn is also known as 'learning theory'. Learning theory can be actively put into practice to help improve cats' lives and make caregivers' lives easier in the process. For example, many cats have negative associations with the cat carrier so getting them to the vets can be challenging. However, if cats were taught to form positive associations with cat carriers, ideally as young kittens, then trips to the vets would be a more positive experience for all involved.

Learning is an important part of life for all animals and is a continual process. It helps them to adapt and survive in their environment. Essentially, learning is happening all of the time. It is worth noting that stress interferes with the ability to learn.

In Cats Protection, this means that it is particularly important to employ stress reduction measures such as a consistent, predictable routine and plenty of hiding places, to help cats settle while in care.

In cats, learning is enhanced during the socialisation period of two to seven weeks of age (see 'Kitten socialisation' section). This is when their brain and sensory systems are going through huge changes and growth. Experiences at this time form nerve pathways in their brains and these are strengthened with repeated exposure.

Learning occurs through the formation of associations in the brain. Associative learning is the process whereby things that occur close together become associated. While there are many different types of learning, this section will focus on the two types of associative learning which are known as 'classical conditioning' and 'operant conditioning'.

Classical conditioning is an association between something that originally meant nothing and pairing it with something important to the animal so that over time, it takes on a new meaning. This was coined by Ivan Pavlov, a Russian physiologist. During experiments with dogs whereby he rang a bell (which originally meant nothing to the dogs) before giving food, the bell took on a new meaning over time. It became a predictor that food was coming next so the dogs would salivate at the sound of the bell. It can also be described as an event, such as an owner leaving the house, and something which reliably predicts it, eg the owner putting on their coat and picking up their keys. Classical conditioning relies on the two events being paired closely together, so that one predicts the other. In cats, this can be used to explain why cats appear to 'know' that they are going to the vets and disappear when the cat carrier comes out of the cupboard as they have formed a negative association between the cat carrier and being taken to the vet practice. It can also explain how cats quickly learn which cupboard contains their food or toys.

Operant conditioning is an association made between the cat's own behaviour and the consequence of that behaviour. It's important that we remember our role in operant conditioning! Many people think that cats are training us, when really we are reinforcing the behaviour. The cat learns that a particular behaviour produces a successful outcome and is therefore more likely to repeat the behaviour in the future. An example of operant conditioning is a cat scratching and pawing at a door to be let in or out and the owner obliging and opening the door. The cat will learn that their behaviour resulted in a successful outcome and they are more likely to do this next time. It can be used to explain behaviours that owners find frustrating such as their cat waking them up at 5am. While cats are naturally crepuscular so they are most active during dawn and dusk, it can be learned behaviour too. Cats are very quick to learn that if they miaow and wake their owner up and the owner feeds the cat (thinking that this is what the cat wants), it will reinforce the behaviour and perpetuate it. See 'Nocturnal activity' for more information.

Punishment

Owners will try a variety of approaches when faced with a cat behavioural problem. Often they concentrate on ways to try and stop the behaviour. The trouble with this approach is 1) it does not address the underlying reason for the behaviour and 2) they may be tempted to use punishment, which in turn can cause further problems, such as a decrease in the human-companion animal bond. Punishment is anything the cat considers as aversive and is aimed at decreasing the behaviour. Cats Protection does not advocate the use of positive punishment and instead promotes the use of 'positive reinforcement' or methods that encourage desired behaviours which are then rewarded. However, owners may not be aware that the methods they are using are, in fact, punishment. Spraying water at the cat or 'rubbing their nose' in the cat's urine to deter the cat from urine spraying are still commonly used as deterrents. Both are aversive to the cat and therefore a form of punishment.

A misunderstanding of what emotions cats can feel and what their underlying motivation is for unwanted behaviours can also lead people to use punishment methods. Frequently owners may cite the reason for urine spraying as the cat acting deliberately to 'get back at them' or as a 'dirty protest' or even as a sign of 'dominance' or 'possessiveness'. Owners can easily become convinced that their cat can understand scolding and 'knows that they have done something wrong'. Current scientific thinking is that cats do not have the cognitive abilities for these very human emotions and motivations, or have a moral sense of right and wrong.





These aforementioned 'reasons' do not accurately reflect how the cat as a species would behave and why. The first port of call for any behavioural problems is always the vet to rule out any possible medical causes.

Using learning theory to train cats

The domestic environment comes with a variety of experiences and potential challenges that cats would not ordinarily face in the wild. However, the application of learning theory can help cats to adapt and cope in the strange world. Cats can be taught to use a cat flap, to accept grooming or to enter a cat carrier. In the rescue environment, it may be necessary to teach cats how to use cat flaps or advise owners how to do so. This is a good example to demonstrate using learning theory.

How to train a cat to use a cat flap

For cat flap training, start by luring the cat towards the cat flap with small treat, a portion of the cat's daily food allowance or fishing rod toy and reward the cat for showing calm (non-fearful) behaviour. This helps the cat to form positive associations with the cat flap. Once the cat is relaxed around the cat flap, secure the cat flap completely open, eg with a peg, and lure the cat through the hole again with a small treat and be sure to give the treat to the cat once they have gone through. Reward the cat consistently throughout the training. Most cats will generally need to do this multiple times before progressing to the next step. Over time, the peg can be moved to hold the cat flap partially open to encourage the cat to start pushing the flap in order to get through. Gradually reduce the amount it is open, until the cat flap is completely closed. Some cats will

also need to get used to the click noise of the flap. For this, manually open and close the flap quietly to start with and reward the cat for relaxed behaviour. Build the training up gradually over time. Cats will need to be trained to use both sides of the cat flap. Just because they know how to go out, does not automatically mean that they know how to come back in. For more information, check out our guide and video on cat flap training on our YouTube channel.

Clicker training

Cats, like many animals, can be trained in a similar way to dogs using a positive reinforcement method called 'clicker training'. Clicker training uses a 'clicker' which is a small mechanical device that delivers a consistent 'click' noise when pressed. It is used in preference to saying a word like 'good' as it can be repeated with the same sound, is distinctive and is unlike other sounds they may hear in their environment. It is used as a marker in training to tell the animal the precise moment that they have done something that will be followed with a reward. Clicker training uses both classical and operant conditioning learning types. In order to be effective, a solid understanding of the principles of clicker training (as well as learning theory) is necessary to ensure the cat gets the correct messages consistently to avoid frustration. Effective clicker training relies on expert timing, dexterity, keen observation skills and is a two-way form of communication between the person and the cat.

For more information, see *Clicker Training for Cats* (Karen Pryor Clicker Books) by Karen Pryor and *The Trainable Cat* by John Bradshaw and Sarah Ellis.

Essential resources and placement

When providing the resources that a cat needs, think about placing them from a cat's point of view. The following tips apply to owned cats as well as to cats in the rescue environment.


Food and water

Cats like to eat and drink away from their litter tray, as it's more hygienic. They prefer their food and water bowls to be separated too, so it is important to try to spread these resources out around the pen or home. Eating and drinking are quite vulnerable activities for a cat. Placing bowls slightly away from the wall to allow the cat to sit with their back to the wall and view the surroundings will allow the cat to feel more at ease.

It can be difficult to place food, water and litter trays in separate sites in the home, and this can be even trickier to achieve in a pen or indoor foster environment. However even a small space between them may make a difference.

A cat's digestive system is suited to eating small meals frequently. Dry food provided in feeding balls or scattered around the house provides cats with the opportunity to spend more of their day seeking out their meal.

Cats often prefer to drink from a moving water source; maybe leave a tap dripping, or try a water fountain. Water should always be available indoors, even if your cat seems not to drink it, in case a preferred outdoor drinking source suddenly becomes inaccessible. Cats generally prefer ceramic water bowls as plastic bowls may taint the taste of the water. Metal bowls can be useful as they are reflective so cats may be alerted if something approaches them while they are drinking. Cats prefer wide bowls so that their whiskers do not touch the sides of the bowl. This is especially important for diabetic cats as they can have particularly sensitive or sore whiskers. Unfortunately in the rescue environment, there isn't the option for the cat to drink from a natural water source but providing water in a bowl does have the benefit of allowing water intake to be monitored. Water intake can be a useful indicator of a cat's health.

Somewhere to sleep

Cats sleep for around 16 hours a day and prefer to rotate their chosen sleeping area so they should be provided with several options.

Cats in rescue care in particular need quiet times to be able to sleep restfully. While cats in Cats Protection's care don't usually have the option to rotate sleeping areas, using the 'double bed system' to provide continuity of scent can help provide reassurance (see 'Essential resources and settling a cat into rescue care' section for more information). The Hide & Sleep® gives options for hiding as well as an elevated perch area. Indoor fosterers may have more opportunity to provide more than one bed to facilitate rotation of the cat's sleeping place.

Scratching post

Cats scratch for two reasons; to keep their claws in good condition and to communicate with other cats. Scent glands in-between the pads of the paws produce a unique smell, which is deposited on the surface that the claws are dragged down. This chemical message, combined with the visual signal of the scratch marks, leaves a message for other cats that this territory is taken.

Cats aren't being naughty when they scratch furniture or carpets. It's just a natural behaviour. Placing an appropriate scratching post at the cat's entry and exit points (by the back door, or next to the cat flap), or next to the cat's preferred sleeping site can help to prevent scratching in unwanted areas.

The ideal scratch post should be sturdy enough so that cats can lean against it, tall enough so they can scratch and stretch onto their tiptoes and be made of a material with a vertical thread.

Toileting area

□ Litter type	Privacy
Litter depth	Location
Litter cleanliness	Number of trays

□ Litter tray type

Cats like to toilet in a safe and private location, away from their food and water. Some prefer the extra privacy of a covered litter tray, whereas others may feel too enclosed. Cats generally like a fine sandy substrate similar to that of the savannah environment with enough depth to be able to bury their deposits. An individual cat's preference for a toileting substrate is formed early on in life. A kitten which always used the same litter is more likely to refuse to use a different litter material later in life, than one that was exposed to a variety of substrates as a kitten. Cats don't like using dirty or soiled trays so make sure the litter tray is cleaned at least once a day.

A cat may prefer to toilet outside, but this is not possible within rescue care, and for owned cats, it is still a good idea to keep a litter tray indoors for those moments when they are caught short! Being creatures of habit, once a cat has a preferred toileting site, they will continue to use it unless something causes them to become averse to it. A lack of privacy and problems with access or cleanliness will cause them to look for another place.

The golden rule for multi-cat households is to provide one litter tray per cat plus one extra. The trays should be sited in different locations around the house. This gives each cat the opportunity to access a toilet safely and easily, and will minimise the chance of toileting in unwanted areas (see 'House soiling' for more information about a litter tray checklist).

Somewhere to hide

When cats feel stressed, they like to hide or get up high. Providing them with opportunities to do this can help them to cope with stressful situations. Cats often find their own hiding places in the home such as behind the sofa or underneath the bed, or they might like to get up high on top of a wardrobe or chest of drawers. All high places that are desirable to cats need to be easily accessible and extra consideration should be given to elderly cats who may be less mobile and find it harder to access these vantage points.

When entering Cats Protection care, cats are often stressed and need to be able to hide, climb and get up high, especially given that they have no option to flee. Stress can be reduced by providing cats with a Hide & Sleep® from the Feline Fort®. Cardboard boxes also make great hiding places in the rescue environment as they are cheap, freely available and disposable for infectious disease control. In some situations, it can also help to cover the glass on the pen door to provide more privacy. This is particularly important for pregnant queens that are about to give birth. For more information about providing a hiding place for Cats Protection cats, see the section on 'Essential resources and settling a cat into rescue care'.







Environmental enrichment

Every cat should have their behavioural needs met through environmental enrichment. This includes providing all of the above (appropriate food, water and toilet provision; a hiding place; somewhere to perch and sleep as well as scratching facilities) along with the toys and feeding puzzles depending on the cat's individual needs.

Cat toys are designed to replicate prey and stimulate natural hunting behaviours. Allowing a cat the ability to demonstrate these natural behaviours is vital for a cat's mental wellbeing. Play with toys also provides an outlet for energy and improves the physical health of a cat. Spending even five minutes a day engaging a cat in a play session can have a hugely positive impact on a cat. Cat toys may be either shop-bought or homemade, but must always be safe for a cat. Cats should not be left unattended with fishing rod toys as they may inadvertently become entangled. Laser pen toys do not make great toys as they can create frustration for the cat when the cat is unable to 'catch' the prey at the end of the game.

Cats in the wild would usually work hard to hunt and catch their food. Ideally, this type of feeding behaviour should be replicated in the home. Food does not necessarily need to be offered from a bowl. Encourage the cat to search out their food by scatter feeding or hiding pieces of dry food in food puzzles. Food puzzles can be homemade – for example, egg boxes, toilet roll pyramids or simply scrunched up bits of paper. Alternatively, commercial feeding puzzles can be purchased and a wide variety of styles and difficulty levels are available. See 'Feeding enrichment in rescue care' for more information and ideas.



Feral cats

Type of cats according to level of socialisation

Cat type Definition					
Feral cat	Feral cats are the same domesticated species of cat (Felis catus) as pet cats, but are not socialised to humans or habituated to the domestic environment ie they have had little or no positive human interaction during their socialisation period of two to seven weeks of age. They are generally free-living as single or colony cat(s) with little or no direct human interaction or dependency and often avoid direct human contact. They essentially behave as wild animals.				
Stray or abandoned cats	Cats that are socialised and previously have been pets, cared for by humans (typically in a home) but now free-living. They have some direct human contact and tolerance and may be fed and provided for to some extent.				
Pet or household cats	Socialised cats living with and cared for by humans, typically spending some or all of their time in a human home.				

Feral cats are the same domesticated species of cat (Felis catus) as our pet cats, but they have not been socialised to humans or the domestic environment. While they are the same species as pet cats, they behave like wild animals and should be treated as such.

Feral cats live alone, or in groups called colonies, and are found in towns, cities and rural areas. Colonies of feral cats are generally born into a 'group scent', whereby they share the same scent and can live in harmony with one another if there are sufficient resources (food, water, toileting and sleeping areas). Within a colony, bonded feral cats will perform mutual grooming and rubbing which maintains the group scent. However, each cat will continue to hunt, eat and toilet alone and see off any intruder cats that try to enter their territory.

Some cats that are free-living outside are known as 'community cats' – they live outside and are not attached to a particular household or owner, but may receive some degree of care, usually in the provision of food. They tend not be provided with veterinary care. Some people in communities feel the cats 'belong' to the community even though no individual person is responsible for the cats' care. These cats can vary in their level of socialisation to people from feral to having some degree of socialisation where they may be used to those individuals that provide food on a regular basis. These cats can be stray or feral and the term 'community cat' refers more to the husbandry and perception of ownership, rather than their level of socialisation.

Abandoned pet cats that have become stray are often part of the community cat population too and these can be successfully rehomed.

Is the cat feral or a stray?

It can be extremely hard to tell the difference between a feral cat and a stray cat, with no scientifically valid assessment tool that easily determines the status of a cat. Additionally, although Cats Protection policies (and policy setting) necessitate these distinct categories, sociability towards people lies on a scale. Consequently, when left to their own free choice, the proximity of feral cats to humans can vary greatly. Some feral cats will be fearful and avoid humans throughout their lifetime. Other cats may be tolerant of human presence at a distance. The two main considerations are behaviour and history.

In general, these cats should not be brought into care to be rehomed, unless the cat chooses to approach people and shows friendly, sociable behaviours in the absence of food.

Additionally, it is vital to gather as much history as possible. Even though many situations appear on the face of it to have little to no history present, asking detailed questions to any feeders, caregivers, neighbours or other local people can provide a surprising amount of information to enable an informed decision to be made with the cat's best interests at heart.

Factors that make it difficult to decide if the cat is feral or not include (but are not limited to):

• the cat is not actually feral, but a fearful stray cat or one in poor condition

• having a limited level of socialisation to people rather than none at all

• a feral or community cat may have some level of habituation towards an individual such as a feeder, in the same way that a fox or squirrel can, so they may appear 'tame' without actually being comfortable around people generally

If in doubt, leave them out!

One of the main factors that can help with the decision-making is that the cat will approach a stranger in the absence of a food reward. If unsure about whether or not to take a cat into care, leave the cat in their current location (unless in extreme circumstances whereby the cat is at serious risk of danger). The cat can be visited at a later date and the situation reassessed to see if their behaviour has changed or more information has become available. It is generally worse welfare for a feral or poorly socialised cat to come into care, than it is for a stray cat to be fed outside. Cats Protection branches and centres can contact the Cats Protection Behaviour team for advice.

Care of feral cats

Colonies of feral cats should not be fed, unless there is a concurrent neutering programme, as feeding increases their fertility. Ideally colonies should be fed as part of an ongoing management programme but there is still benefit in undertaking trap, neuter and return (TNR) programmes even if there are no feeders. Feral cats should not be overfed as obesity is contrary to their welfare and after neutering their nutritional requirements may decrease.

All feral cats that are neutered must be ear-tipped, which means the tip of the cat's left ear is surgically removed under anaesthesia while being neutered. This is an internationally recognised method of showing that the cat has been neutered and if re-trapped, can be released again immediately rather than being anaesthetised again.

The best way for Cats Protection to help feral cats is to trap and neuter them and for them to be returned to their familiar environment (or a suitable alternative habitat only if it is not possible to safely return the cat to the original site).

Feral cats should only be confined to pens or cages for the minimal time required for neutering or for minor health issues to be resolved. They should never be in care for prolonged periods and they shouldn't be handled.

Bringing a feral cat into care to be placed into a pen would cause the feral cat considerable mental distress as well as posing a significant risk to human health and safety. Feral cats should not be handled directly as they may cause injury to the handler through fear-based aggression. Instead feral cats should be transferred directly to the local vet practice that has been made aware of their imminent arrival. Traps should be covered with a towel to reduce stress while still allowing for adequate ventilation. Feral cats can often appear more docile when stressed but never underestimate this. They will attack (like any animal could) if they feel threatened. If a Cats Protection branch or centre has inadvertently taken in a feral cat or suspect that a cat in their care may be feral or poorly socialised, or if they are asked to bring a cat into care that requires trapping, they should contact their Cat Welfare Manager or Regional Centre Operations Manager, who can contact the Veterinary department and Behaviour team.

Why confining or attempting to tame feral cats causes poor welfare

Research show that the fear response occurs by six weeks of age in kittens. The socialisation period in kittens is between two to seven weeks, to allow for individual variation. The taming or 'bringing round' of feral cats should never be attempted in any feral cat that is eight weeks of age or older. This means that if handled by humans after this, these cats are guite literally terrified and it seriously compromises their welfare by having to endure the 'taming' or 'bringing round' process. Not only does it force the cat to endure or interact with stimuli that they are fearful of, including people, it takes away opportunities for the feral cat to display their natural behaviours and their ability to choose. This removal of choice in itself will be highly stressful. This is flooding and highly likely to cause learned helplessness. Superficially, learned helplessness can give the impression that the cat is now coping and a common misinterpretation arises when people observing the cat confuse learned helplessness with acceptance of people. The cat still finds the stimuli aversive and it will be causing the cat continual stress but the poor cat has quite literally given up.

Additionally, some cats may have a genetic predisposition to fearfulness, whereby the trait for fearfulness can be passed from parent to kitten. Similar to above, attempts to 'tame' these fearful cats can severely impede their welfare.

Like any other cat in need, they deserve our help, but we need to ensure that we 'think cat' objectively in these scenarios and not let anthropomorphism cloud our decisions and actions. We must appreciate that these cats are inherently fearful and avoid intensifying their fear response. Returning feral cats back into their most familiar, natural environment is the most appropriate thing to do.

Hoarding and multi-cat households

Situations arise whereby a kitten is born into a domestic home environment but due to a lack of any form of socialisation or even social interaction within the first two months of their life, the kitten grows to display behaviours more typically associated with feral cats.

Cases like these most often arise in houses where owners have a large multi-cat household or when the owner suffers from mental health issues which result in cat hoarding. This leaves a unique situation where the kitten has some minor socialisation to the domestic setting, but the kitten may have had little or no interaction with people. In some hoarding situations, owners may not have had time to socialise kittens, and in some situations may not even be aware that the kittens have been born. These cats can be completely fearful of people, as a feral cat, but without the experience of living outdoors. It is best to address these situations on a case-by-case basis. Cats Protection centres and branches can contact the Cats Protection Behaviour team for advice and support on working with these non-socialised, indoor cats.

For more information, see The Feral Guide.







Behaviour in the rescue environment

Behaviour-friendly accommodation

Cats in Cats Protection care may be housed indoors in a room or outdoors in a pen, across the Cats Protection network of centres and branches. Cats Protection has reviewed its cat accommodation or 'pen' design in accordance with ADCH guidelines and sought to design a standard to be used across the charity. The following information is designed to give an overview of general principles rather than discussing the specifics of particular pens or foster rooms. Like all cat accommodation, the pens are intended to be for temporary use rather than long-term housing; all cats are available for rehoming and it is not Cats Protection's purpose to keep cats in sanctuary. One of the main aims of any rehoming organisation is to maximise throughput of animals through the system. The longer the animal is in care, the more likely they are to suffer from stress, which may result in disease or behavioural issues and poor welfare. Length of stay is therefore an important measure of success from both a welfare and operational perspective.





Pen design from a behavioural perspective

Fundamentally, cat welfare must always be at the core when designing cat accommodation. While this may sound a very obvious statement, it can become complicated when a wide variety of aspects need to be considered, especially if some are opposing one another. Cats Protection's policy is to house cats from different sources in separate pens, meaning that the average pen houses one to two cats, or a queen and her litter, who came together from the same house originally. This policy is in place to protect cat welfare from both an infectious disease control and behavioural perspective.

Completely solid, non-see-through barriers (not frosted) between pens are important in preventing cats seeing other cats, which is a known source of stress, especially when confined in close proximity to unknown cats. Even frosted/ semi-see-through side barriers will allow cats to see shadows and this can cause behavioural problems and stress. Clear barriers can be used in areas that are not overlooked by other cats to allow adequate light to enter into the pen. Consideration also needs to be given to the positioning of pens so that cats are not facing other cats. Cats Protection's standard pen accommodation uses a smooth, impervious material, which creates a solid, non-see-through sneeze barrier (to help reduce the risk of infectious disease) between the cats. Cats Protection took the decision to not use stainless steel for all new pens as it is cold to touch, noisy and the cats can become stressed by seeing their own reflection.

Larger pens are likely to have a positive effect on cat behaviour and welfare, as well as improving throughput. Having the opportunity to hide is a vital need that must be met for all cats, regardless of personality, for the whole duration of their stay. It is crucial for every cat in all of Cats Protection's centres and branches to be provided with a hiding place, ideally Cats Protection's Hide & Sleep[®] which is part of the Feline Fort[®] system. There is often a trade-off between providing cats with the ability to hide while also allowing the public to view cats which are ready for rehoming. Previous research conducted at Cats Protection on a similar product, the British Columbia Society for the Prevention of Cruelty to Animals (BC SPCA)'s Hide, Perch and Go box[™], concluded that cats given a hiding place adapted more quickly, were much less stressed and took no longer to home.

Cats operate in terms of threedimensional spaces and must have a choice of areas in which to spend time. This is important as cats feel safer in elevated places and this is an essential cat need. Access to elevated places must be suitable for cats with mobility issues.

Cats Protection has decided to move away from off-thefloor cabins (which are typically positioned at waist height) in favour of full height, walk-in pens. This decision is for human health and safety reasons to prevent injuries caused by bending, over-reaching and twisting. As well as larger pens benefiting the cats, it is also more ergonomic for those working in the pens. The standard pen design usually has a separate enclosed sleeping area and separate enclosed run. These areas have different temperature requirements and fulfil different functions, allowing the cat to have more choice in its environment.

When designing a new centre, if space and budget allows, then adding in a 'behaviour or enrichment room' can be really useful for working with cats with behavioural issues, as well as providing more space for exercise which is particularly useful for overweight or obese cats. Having a separate room placed near to the admission pens for owners relinguishing their cats is a good idea to provide extra privacy for those owners, away from a busy reception area. For owners looking to adopt a new cat, then a separate 'meet and greet' room placed near to the homing pens can allow extra space to get to know the cat better and can be useful for introducing families with children to a new cat.

The overall site of a potential new centre or foster pen needs to be considered carefully, particularly in terms of noise levels that the cats might experience. As a species, cats are particularly interested in the environment around them and therefore it is important that the cats have a stimulating view from the pen. This can be done by planting shrubs and plants that attract wildlife such as buddleias that attract butterflies. or by placing bird feeding stations nearby. Most cats will benefit from this, however all cats should be carefully monitored to ensure they do not become frustrated. If signs of frustration are suspected, contact the Behaviour team at Cats Protection who will be able to advise.

Ultimately there is no 'perfect' pen design but a compromise that best meets as many of the aspects required as possible. At times, there are seemingly competing considerations. However, compromises need to be made and the outcome must meet both cat welfare needs and human health and safety requirements.

- Cats housed singly or together from the same source and in the same social group
- Avoid cats being able to see other cats non-see-through barriers
- Provide enough space for appropriate resource placement
- Stress reduction the importance of hiding places and elevated perches
- Give cats choice wherever possible
- Cats love a view!

Key points

- Cats housed singly or together from the same source and in the same social group
- Avoid cats being able to see other cats – non-see-through barriers
- Provide enough space for appropriate resource placement
- Stress reduction the importance of hiding places and elevated perches
- Give cats choice wherever possible
- Cats love a view!

Housing cats together vs separately

Cats in the care of Cats Protection must always be housed individually or in pairs. This is not only from a disease control perspective; it is also vital for the cat's behavioural health. The only exceptions to this rule are:

- a nursing queen and her kittens
- orphaned kittens from the same litter

It is important to remember that kittens can become sexually mature as early as four months so consideration should be given to prevent unwanted litters. The decision on whether to house individually or in pairs can sometimes be dependent on available pen capacity as well as whether the cats are bonded. For further guidance, please refer to the Cat Care Guide.

It can be hard for owners to tell whether cats are in the same social group as the behaviours are so subtle. In addition, the natural human bias assumes that cats must have the same needs and motivations as us. This leads owners to anthropomorphise that their cats cannot be split up, must stay together in Cats Protection and be rehomed together. Many cats, including related cats, are not in the same social group and to keep them together would cause unnecessary social stress leading to a negative impact on their welfare.

The more information that is gained about cats from their previous owners prior to coming into care, the better informed an animal welfare charity is to make appropriate welfare decisions for them. In addition to the previous history, behavioural observations are particularly useful and accurate record keeping is key. The confined nature of the rescue environment means that cracks in feline relationships, which may have been masked in the home by actively avoiding one another, often become more obvious. Cats in care need to be carefully monitored for signs of social stress behaviours and where necessary, accommodated in different pens. Once split, it is important to continue to monitor both cats' reactions to decide whether to home them separately or, more rarely, gradually introduce the two cats back together. Many cats once split are much happier and are often rehomed more quickly too (see 'Cats living together' section for more information).

Essential resources and settling a cat into rescue care

Providing a cat with all their essential resources is an important way to enhance a cat's environment and attempt to meet their mental and physical needs. As a solitary species, a cat's wellbeing is very much linked to them being in control of their environment. On entering the rescue environment, this control is taken away from them. Every cat should have their behavioural needs met through the provision of essential resources and environmental enrichment.

A place to hide is not just for cats showing signs of severe stress, nor is feeding enrichment just for overweight, long stay or difficult-to-home cats. They should not be viewed as 'nice to have' or 'optional'. The benefits of appropriately meeting cats' needs is that it helps cats to settle into their new, alien environment and can prevent the development of many behavioural problems. It will shorten the time to rehoming and ultimately leads to happier, healthier cats.

Settling cats into care

In addition to all their essential resources, cats understandably need to feel safe and secure. The change of environment from everything that the cat previously knew is a huge stressor which should not be underestimated. Bear in mind that the cat does not know that they are being helped, particularly when they first arrive into care. From their perspective, this change is completely 'out of the blue' and they have no idea what to expect going forwards. It is vital that they are given a predictable and consistent routine in order to adapt and settle in.

While every cat is an individual and will adapt at different rates, it is worth taking the initial approach with all cats to enter their world quietly, avoid eye contact as this can be interpreted as threatening by the cat, and only spend the time required to provide clean resources etc in the cat's pen or room. Many caregivers find their natural inclination is to talk softly to the cat, stroke them, and will look at them without even being aware of doing so, in an effort to show that they are friendly and mean no harm. Unfortunately, many cats will find this overwhelming on top of the huge changes they have just been through.

While it will feel unnatural for people to ignore a cat when they first arrive into care, this is much preferred by the cat and it is important to put their welfare first. Instead, slow blinking at a cat to show that the caregiver is friendly and allowing the cat to come to the caregiver is a calmer approach. This allows the cat to have control over the interactions and progress at their own pace. Introducing a 'cue word' can really help to give the cat some predictability. Choosing a word to say as you approach the pen or foster room and a different one when leaving (whereby the cat will be left alone for a while afterwards) and then saying them in the same way each time can help the cat predict what's about to happen. It doesn't matter what the words are (as cats don't speak English!), but keep it short such as 'rhubarb' and 'custard'.

See 'A cat's hierarchy of basic needs' in *The Welfare Guide* for more information.



A place to hide

Hiding is a behaviour displayed by all cats and is the most important coping mechanism a cat will use when they are in conflict and unsure of something. They need to be given a physical place that they can get into and hide, preferably higher than ground level.

Research looking at Cats Protection cats has shown that providing a hiding place will lower the level of stress a cat is experiencing and will help them settle into a new environment faster. Having a hiding place can reduce the time it takes for them to be homed, as cats are more likely to feel relaxed and approachable.

Cats without a place to hide may be seen trying to get underneath their blanket or bedding as an alternative. This is not a suitable hiding place for a cat, and an option that is fit for purpose should be offered. The Hide & Sleep[®] has been developed by Cats Protection, and is the perfect way to offer cats a place to hide. It also offers the option of a place for a cat to perch. As it can be fully disinfected, the Hide & Sleep[®] can be reused for many years. Alternatively, a cardboard box (with both entry and exit holes cut out) is a great solution in the rescue environment as it is cheap, freely available and disposable.

An elevated perch

Getting up high is another important coping mechanism for stressed cats as it helps them feel safer by giving them a good vantage point. Shelving provides a good platform for cats to perch. An ideal place to perch can also be achieved by providing a Hide & Sleep® from the Feline Fort®. The top section provides a place to perch, ideally with a cosy blanket inside.



Visual contact between pens

It is highly stressful for cats to be able to see, smell and hear other cats in rescue care. It can be extremely difficult to remove the smell and sounds of other cats in this environment; another reason why being in rescue care is not an ideal scenario for cats long-term. However, we can easily prevent cats from seeing other cats while they are in the care of Cats Protection.

In order to remove visual contact, completely solid, non-see through panels should be used between individual cat accommodation and pens (see 'Behaviour friendly accommodation' section). 'Frosted' panels where the material is semitranslucent are not sufficient as they still allow the cats to see the shadows of other cats. Taping newspaper or bin liners to the inside of the pen can be a useful temporary alternative.

Scent profile

Each cat's scent profile is unique. They rely on their own scent to orientate themselves in their environment. It is important to maintain the cat's own scent in a new environment to help them settle in.

Upon relinquishment, the previous owner should be encouraged to bring a piece of old bedding or clothing which will have a familiar scent from both the cat and the previous home environment. When a new owner is found, they may wish to bring a similar item from the new home to introduce into the pen prior to homing. This can be left in the pen for a few days to allow time for the cat to adjust to the new scent as well as time for the cat to add their own scent and pheromones to something that will go home with them.

Double bed system

Cats need long periods of sleep and prefer to rotate their sleeping areas. Providing a choice of sleeping areas is ideal, although not always achievable in rescue care.

Without their own scents around them in the rescue environment, cats become very disorientated and stressed. The 'double bed system' is a method where the cat is given a minimum of two Vetbeds® or blankets, and only one is removed and replaced for cleaning at a time. This ensures that the cat's pen always has 'scent continuity', ie there is always something in the pen that retains the cat's own scent.

Scratching post

Scratching is important way for cats to maintain the health of their claws. It is also a way for cats to mark their territory via the scent glands in their footpads. Scratching behaviour is a normal and natural function for cats. Their wellbeing is improved when they are able to exhibit this behaviour. In allowing cats to leave their scent signals in this way, we can give them back some control over their environment.

Traditional scratching posts are difficult to disinfect and therefore are a fomite risk for infectious disease, so are not ideal for use in Cats Protection. However, a variety of shop-bought disposable cardboard or carpet options are widely available.

Homemade disposable scratching options are cheap or free, such as carpet tiles and rolled up corrugated cardboard. These can be attached to the mesh of a pen door by cable ties or nailed to a wooden plank inside the pen. Place them high enough for the individual cat to fully stretch when scratching.

Scratching facilities can be sent home with the cat as an extra measure to introduce the cat's scent into a new home.

Use of pheromones

Another way cats introduce their own scent into their environment is by rubbing their face on objects to leave behind their specific facial pheromones. Pheromones are chemical substances that seem to transmit highly specific information between animals of the same species. Cats feel safe and secure when they smell their own rubbed scent message.

A synthetic spray or plug-in version of this scent message, such as FELIWAY[®] Classic, can help to reduce the stress brought about by a change in the cat's environment. It is not advised to spray directly into a cat's pen as this would be in close proximity to the cat which cannot escape the overwhelming scent of alcohol. In an outside pen, spraying directly into the pen would ineffective as the synthetic pheromone would disperse into the outside air. Instead, spray onto a clean cloth and allow 15 minutes for the alcohol component to evaporate before placing the cloth into the cat's pen or cat carrier. This should be topped up once or twice daily if possible.

See the 'Pheromones' section for more information.





A stimulating view

An interesting view outside the pen or foster room reduces stress levels by providing mental stimulation for the cat. Careful planting to encourage wildlife, such as buddleias to attract butterflies will provide the cats with a view from their pen. Bird feeders are another useful way of attracting wildlife for the cat to view from the confines of the pen (see 'Behaviour friendly accommodation' for more information).

Feeding enrichment

When a cat's environmental needs have been taken care of as described above, and their stress levels have reduced having adapted to being in care, consider introducing feeding enrichment and toys.

Why use feeding enrichment rather than food bowls? The wild relatives of domestic cats have to hunt for their food. Therefore eating tends occupy a lot of time and provides mental stimulation. Each part of the hunting activity – the stalk, pounce, grab and kill – releases hormones called endorphins which makes the cat feel happy and helps provide the drive for cats to continue to want to hunt even if they are well fed.

Natural behaviours such as hunting cannot be fully replicated in the rescue pen environment. However, if cats are allowed the opportunity to exhibit a type of hunting behaviour, cats will feel less frustrated when living within the confines of their pen.

Feeding toys and puzzles can be introduced to the pen to allow cats to exhibit some of their natural hunting behaviours. Consider starting with some very simple feeding enrichment, such as scattering food in the pen for the cat to look for to get them used to not eating from a bowl. Start very simply and build up the difficulty level at the individual cat's pace. Food can be hidden inside homemade feeding toys such as scrunched up paper, toilet roll pyramids and clean egg boxes. These are free, fun to make and there are no disease control issues as they can be thrown away. If using commercial feeders, ensure they are easy to clean and disinfect. Caregivers can adjust the level of challenge offered by some commercial feeding puzzles

according to the individual cat's capabilities. Take the time to show each cat how to use the feeding enrichment to avoid frustration. If using commercial feeders, always follow the manufacturer's guide on how to introduce it.

The welfare of all cats can be enhanced by the introduction of feeding enrichment. Cats showing aggressive behaviour can still benefit from the introduction of feeding enrichment but for human health and safety reasons it is advisable to use only basic scatter feeding or egg boxes to start with that won't require a demonstration.

It is important to remember that when using feeding enrichment toys, always use food from the cat's calculated daily food allowance. (At Cats Protection, treats are not used as these will add additional calories and can easily lead to obesity due to the sedentary lifestyle when confined.) It also slows down the process of eating, which prolongs a positive, enjoyable experience for any cat, and is particularly good for those cats which eat too quickly and regurgitate their food.

Cats using feeding enrichment toys are more engaging and appealing to the public. Photographs and videos of cats using feeding enrichment can be uploaded onto social media pages. This is an excellent way to promote the more shy, anxious or overlooked cats, who may not interact very much during opening times, and increase their chances of finding a home.



Toys

Toys for cats are designed to encourage hunting behaviour. Toys often mimic the characteristics of prey, eg size, shape and materials used, such as feathers or fur.

Once the cat has settled in to their new environment, playing with toys will provide novelty, exercise, mental stimulation and the opportunity for interaction with people. Supervised play, for example with a fishing rod toy, forms an important part of the cat's daily routine. Ensure these types of toys are never left with the cat unattended for health and safety reasons. Larger cardboard boxes with holes in them can make fun toys for cats, especially kittens, and they can either be disposed of afterwards or homed with the cat. Whether shop-bought or homemade toys, ensure they are safe for cats. Laser pens should be avoided as discussed previously in 'Environmental enrichment' within the 'Essential resources and placement' section.

Cats have their own play preference which was formed at the time they were kittens. As a result, cats may chose to ignore some types of toys. It is a good idea to preference test toys which can then be used to inform the new owner and hopefully help bonding. To ensure novelty is maintained, consider a daily change of toys or change the selection of toys on offer two or three times a week.



Behavioural processes within Cats Protection

Unlike in a boarding cattery setting, where the owners are more likely to brief the staff about their cat's likes and dislikes and provide an up-to-date vaccination history as a minimum, animal welfare organisations are faced with caring for a large number of cats often with little or no medical history or background information. A large proportion of the intake population in Cats Protection are stray cats as opposed to those relinquished by an owner. Other animal welfare charities may take in mostly abandoned cats, cats from multi-cat or hoarding situations, or welfare cases where the cat may have experienced cruelty or neglect. This can make it extremely difficult to know much about the individual cats. Animal rehoming charities have a responsibility to provide a good level of care for cats while in their care and to find the cats good homes. It is certainly not an easy task and is one that is made more difficult if not much is known about the cats. It is important to understand cats as both a species and as individuals. While in Cats Protection care, a cat's health, behaviour and stress levels need to the continually monitored. Having a standardised approach enables caregivers to be objective and consistent towards each cat every step of the journey through the charity.



Cats Protection - Cat profile questionnaire

Thank you for completing this questionnaire. It is important we get as much accurate information as possible to help with the care of your cat. Please answer in as much detail as possible.

Cat name) :	Cat-a-Log number (CP use only):					
Cat des	Cat description						
Breed					Colour		
Sex	☐ Male ☐ Female	Neutered?	□Yes □ No		Age		
Reason	Reason for rehoming						
	lid you get your cat from? Protection, other cat rescue, si end etc.)	tray, online,					
How lon	g have you owned your cat?	>					
	ny previous homes has you g your own?	r cat had,					
				1			
Treatme	ents	Date of treatment					
Vaccina	ted? 🗌 Yes 📄 No			If yes	s, please b	oring vaccination card with you.	
Wormed	l? 🗌 Yes 🗌 No			Prod	luct:		
Treated	for fleas? Yes No			Prod	luct:		
Microchi	ipped? 🗌 Yes 🗌 No						
_	Has ongoing medical condition? Yes No		Ve	t pract	tice registe	ered with:	

Intake questionnaires

Intake questionnaires are an invaluable source of information for cats that are relinquished by an owner. This is in addition to the acceptance form that legally signs over ownership of the cat to the animal welfare charity. If given a structured framework of questions, information may even be given for stray cats that have been in the area for a while or have been fed by someone. Many owners will struggle if asked questions that are too broad, such as 'Tell us all of your cat's little guirks'. An intake guestionnaire is a great way to consistently gain the same categories of useful information. It can aid husbandry while in care, help

provide background information in medical and behavioural problems, and facilitates the rest of the behavioural processes in the charity such as helping to match the right cat to the right home. In Cats Protection, there are a number of benefits gained by emailing the cat profile questionnaire (which is the Cats Protection intake questionnaire) at the point of putting a cat on the waiting list:

- cost it is free to email the questionnaire
- low impact on employee and volunteer time – as the onus is on the owner to fill in the questionnaire

- compliance the owner is more likely to complete the questionnaire prior to the point of relinquishment, especially as they have more time to complete it and can look up information if necessary
- less emotive owners are less emotional while their cat is on the waiting list compared to the moment of relinquishment, where their emotional state may mean they want to relinquish their cat as quickly as possible

Behaviour observations in care

Recording a cat's behaviour, body language, facial expressions and preferences in an objective, consistent manner is extremely important to enable informed decision making in order to improve cat welfare (see 'Communication' section for more information). When cats first arrive at a branch or centre, they all experience some degree of stress.

Cats adapt at different rates so it is vital to monitor these changes over time rather than recording behaviour observations as a one off. Daily behaviour observations need to go into specific detail such as 'dilated pupils, ears turned to the side' as opposed to more general comments such as 'nice boy'. Behaviour observations can also provide an indication as to when handling may not be advised, personal protective equipment may be needed and when further advice needs to be sought. Welfare audits or quality of life assessments often incorporate some form of behaviour observations to help create an overall assessment of the welfare of the animals in care (see The Welfare *Guide* for more information).

Matching the right cat to the right owner

Although a cat's behaviour may change between different homes and owners, past behaviour is often a good predictor of future behaviour. The combined information gained from the previous owner and observations while the cat is in care can be used to determine what kind of home is most suitable and help to create personalised profiles of each individual cat. Successful homing (whereby the cat is not returned, and both owner and cat are happy) relies on matching the right cat to the right owner as well as managing the owner's expectations. It is important to take into account what each potential adopter is looking for as well as discussing the owner's needs and expectations. Information gained about the cat, including any medical or behavioural problems that are known at the time, must be disclosed to the adopter and ideally recorded on the accompanying paperwork, such as the Cats Protection medical summary form.

Owner learning and support

Undoubtedly the level of knowledge an owner has about cat care and behaviour will have a big impact on their relationship with their newly adopted cat and will increase the likelihood of a successful rehoming. While the temptation may be to give the new adopter as much important information as possible, this may result in information overload. Instead, building a positive relationship with the new adopter may be a better long-term solution. In this way, the adopter should feel comfortable asking any questions they may have and encourage them to seek advice from Cats Protection team if needed.

During conversations with the adopter, a lot of information can be shared with them and relevant questions may already be answered. Leaflets and information sheets can provide further reading, but again, this needs to be on a case-by-case basis, rather than handing out a handful of leaflets that may lead to information overload.

Follow-up calls and conversations with the adopter will further give them a chance to ask any questions and raise any concerns they may be having while their new cat is settling in. They are likely to be appreciative of a follow-up phone call, especially if they understand that the call is motivated by genuine interest in the adopter, their cat and the relationship they are building. Hopefully this will continue to strengthen the relationship between the adopter, Cats Protection team members and further encourage new owners to seek help and advice from Cats Protection.



Cat handling

Handling an unknown cat can be a daunting prospect. The reaction a cat may have in response to being handled can seem unpredictable and at times, dangerous. So how can respectful cat handling be prevented from descending into uncontrolled cat wrangling? The key to working cooperatively with cats is being empathic to their nature and behaviours and trying to imagine what their experience is like.

Why cats respond the way they do

Cats are highly attuned to their environment and when placed in strange surroundings will often become fearful, even before any handling has been attempted. Cats in the wild depend on knowing their environment inside and out for survival. For this reason, being placed in novel surroundings (such as a new pen or treatment room) will instil fear into a cat.

Many of the behaviours cats show in an unfamiliar situation stem from the fact that while they are predators of mice and small birds, they are themselves prey to other larger animals. Being a larger animal, humans are in themselves threatening. As humans are already scary to a cat, every attempt must be made to avoid using signals that will make people seem even more hostile, for example scruffing, making shushing noises (which may be viewed as hissing by the cat) or looking the cat directly in the face.

If a cat views a situation as dangerous, their instinct is to respond by fleeing and attempting to hide from the perceived threat. When they can't flee, they may either freeze or fight (in selfdefence).



General handling principles

When handling a cat, allow plenty of time. Always proceed at a slow and deliberate pace, allowing the cat the time it needs to adjust to the situation. Rushing will only serve to heighten the cat's sense of fear. Cats will pick up on the handler's own emotional state. If the handler is anxious or nervous, the cat may respond in kind. Stay calm, relaxed and confident throughout. Have everything prepared in advance and close to hand before approaching the cat. Allow the cat to dictate the pace. If a cat does not wish to leave the carrier of their own accord, do not tip the cat out. Using a carrier that can be split into two halves can provide the perfect solution in allowing the cat to remain in the perceived safety of the bottom half of the carrier while still allowing access to handle the cat.

Do not scruff the cat or use 'clips' for restraint. Some people think that scruffing mimics neck biting, such as when queens transport their very young kittens, however it is interpreted differently by the cat. Neck biting is also used by cats for restraint during mating or in a fight. When a cat is scruffed by a person, this most closely resembles the latter scenario of negative restraint. Scruffing a cat does not form part of a respectful, cooperative, positive handling experience and is best avoided.

A hiding place should be provided, especially for fearful cats. Hiding is an important coping strategy for a cat and fear will be lessened if the cat is allowed to conceal itself. Placing a towel over the cat can fulfil this requirement, still allowing parts of the body to be accessible to the handler. Alternatively, a towel could be built up to loosely surround the cat to provide a sense of security.

Cats rely heavily on scent signals to feel safe. Having a towel or other item close at hand which carries the cat's scent will be a huge comfort for the cat. Using synthetic pheromones such as FELIWAY[®] *Classic* in the handling environment will also help. If the cat flees, do not attempt to chase them. Chasing will exacerbate fear and increase the potential for self-protective aggressive behaviour. Instead, give the cat time and space to calm down. Place the carrier, covered with a towel, nearby to give the cat the option of retreating to the safety of the carrier of their own accord. If the cat is highly stressed, it may be best to abandon handling for that day and try again once the cat has had time to settle. If there is no other option but to proceed with handling a very stressed cat, then the use of chemical restraint should be considered. Some sedative products tend to mask stress rather than decrease it, which can be harmful. While the cat may appear less stressed outwardly, in reality this may not be the case. A vet can advise on the most appropriate type of chemical restraint to fit the situation.

General principles designed to reduce fear that can be easily adopted when handling a cat

- Use synthetic pheromones like FELIWAY[®] and eliminate strong scents
- Have some familiar belongings with the cat
- The fewer the handlers, the better
- Do not stare at the cat look from the side
- Cats want places to hide use a tall-sided box to examine them in with use of towels and blankets
- Cats may prefer to perch on top of a box when being handled

 this gives them a sense of control
- We are scary! Stand to the side instead of looming over the cat

- Give the cat a sense of control avoid scruffing or 'clipping'
- Move slowly
- Stay calm and speak in a soft voice
- Allow the cat to exit the carrier of their own accord, or allow them to sit in the bottom section of the carrier to be examined

Reading their body language

Many well-socialised cats will seem calm and relaxed in a new environment and may appear curious and confident. Even though a cat may seem easy to work with initially, it is still important to take steps to avoid any exacerbation of fear. Always be aware that a cat may be behaviourally inhibited initially, and there's a risk of aggressive behaviour once they start to adapt. The cat's emotional state can change rapidly in response to our actions. Take the time to appraise the cat's body language and adjust your handling technique accordingly.

The table opposite describes the different emotional states cats may experience when handled, and how this may change a handler's approach. Cats that are initially calm may ascend the scale of emotion in response to something that causes them to feel fearful.

Emotional state	Body language	Approach to take
Relaxed Image: Second	Lying on their back to expose vulnerable areas such as the belly. Ears are forwards, whiskers are in the neutral position and there's no tension in the face. The cat feels content or confident in the environment.	The aim here is to prevent fear from occurring. Talk to the cat on your approach and allow them to adjust to your presence before removing them from the pen. When examining the cat, provide an option for hiding and offer food as a distraction. Some cats, especially kittens, may enjoy playing with toys as a distraction. Middle-aged or senior cats may prefer a soft surface to sit on as they may have painful joints.
Seeking or soliciting attention	This is a greeting behaviour with the tail up and the cat wishes to interact with the handler but this behaviour may mask an underlying sense of unease in some cats.	Approach with confidence; reciprocate the greeting by talking softly to the cat and allow them to adjust to your presence before removing them from the pen. Stand to the side and avoid looking the cat directly in the face.
Alert	The ears are pricked forwards and the whiskers may be forwards too. This cat is highly attuned to the surroundings and may react with fear unless handled appropriately.	Approach with confidence as above; be aware the cat is alert to your presence. Talk to the cat to reassure them of your presence and handle gently. Try gently touching the cat first to see how they respond.
Tense/anxious	The pupils are dilated and the front paw raised to show unease. This cat is assessing the environment and has perceived a threat; the cat may prefer to hide or flee.	Approach with confidence and sensitivity. The cat is displaying anxiety and we need to be aware of this. Talk to the cat on approach; make your movements slow and quiet. You may require a towel to assist you if the cat's behaviour turns into stress or fear.

Emotional state	Body language	Approach to take		
Subtle stress/fear	Pupils are dilated, ears turned out slightly to the side, hunched body posture in a crouch to make themselves appear smaller while being ready to run. This cat feels threatened and desires to hide and/ or flee. The cat may feel inhibited from doing so and freeze instead.	Approach with confidence and sensitivity. The cat is stressed but not displaying overt signs of this. Observe the cat's pupil size and ear positioning along with their body position. Talk to the cat on approach and a towel may be helpful with these cases. Avoid any actions which cause the cat to feel the need to use aggressive behaviour.		
Very stressed/fearful	Pupils are dilated, ears turned out completely to the side, avoiding eye contact, may also be seen licking the nose or swallowing/gulping out of context. The cat is frightened, freezing and is attempting to hide.	Approach with confidence and marked sensitivity. The cat is outwardly telling you they aren't happy with the situation and they may become aggressive in their behaviour towards you. Ideally avoid interacting with this cat and only handle if you have to. Talk quietly to the cat on approach and make your movements quiet and slow. A towel is useful when handling, as it provides protection and can often be reassuring to the cat. Try to use a towel or blanket which has been in contact with the cat as it will have a familiar smell.		
Depressed	Hunched over shoulders, avoids eye contact, may feign sleep. Cats that have experienced prolonged periods of stress may enter a 'shut down' state. Normal responses to the environment are absent or reduced.	Approach calmly and with confidence. Talk to the cat to reassure them. Touch the cat gently to see how they react, make your movements soft and quiet. If a towel will be reassuring then it would be appropriate to use one during handling. Keep all handling as brief as possible to avoid building up negative experiences for the depressed cat.		

Information for caregivers

Cats living together

As a species, today's domestic cats do not need the companionship of other cats. This differs to dogs or humans, which are fundamentally social species. Often, one of the biggest causes of stress to cats is the presence of other cats.

As individuals, however, some cats can be sociable with other cats and form relationships. Sociability in cats is affected by a number of factors, including genetics, breed, kitten socialisation, personality, previous experience, relatedness, and social maturity. Social maturity occurs between the ages of 18 months and four years and marks a time when cats develop their independence. The effects are variable, even cats that were well bonded and/or related to one another, can become more distant with each another during this time. Others may continue to be friendly with one another while others fall out completely.

How cats relate to one another

Having evolved from a solitary ancestor, cats have not developed complex forms of communication needed for group living. The underlying solitary blueprint for their behaviour can be seen in our pet cats that heavily rely on scent communication to convey messages. Cats prefer to avoid conflict and they lack visual appeasement signals to diffuse conflict with other cats. This is yet another example that demonstrates why cats are not small dogs and that it is crucial that we treat them according to their species-specific needs.







It is easy to see how tempting it is to ascribe the 'dominance' label to groups of cats – a common scenario is how cats behave around food. If a cat is not at the food bowl first, or appears to be 'holding back', it is often assumed that this is the submissive cat and that the dominant cat always gets the food first. Given that cats are territorial animals, they merely want all the resources, like food, for themselves.

Rather than describing a cat as 'dominant', it is more useful to encourage caregivers to think about their cat's personality such as bold or shy. Other contributing factors affecting the cat's behaviour include the level of available resources, the cat's level of motivation, previous experience of a situation, and any potential medical conditions. All of these factors affect a cat's behaviour around food – a situation that causes many owners to describe a particular cat as 'dominant' in the household.

Cats are very subtle in their use of space. It is common for one cat in a multi-cat household to predominately reside upstairs while another cat lives downstairs. Unless owners draw up a house plan to examine their cats' use of space, it can be easily overlooked. However, most owners notice the change in their cats' behaviour if one sadly passes away. Frequently many people will comment that perhaps their 'dominant' cat died and therefore the 'submissive' cat is behaving differently as a result, and often talk of groups of cats 'fighting for the new top spot' or 'reorganising the pecking order'. Cats do not form hierarchies. What people are noticing is that the remaining cat starts to use the rest of the house. Now rather than being supressed by a so-called 'dominant' cat, the explanation is much simpler: the cat is using more space in the house because they can! The space is available for the taking, so they spread out.

Social groups

Cats that show friendly or affiliative behaviours towards one another are likely to be in the same social group. These behaviours include:

- mutual grooming (allogrooming)
- mutual rubbing (allorubbing)
- sleeping together touching
- choosing to spend a lot of time in close proximity
- greeting one another with a tail up, touching noses
- communal nursing of young, sometimes seen in feral colonies that consist of related female cats
- play fighting claws in, social roll, taking chasing in turns (looks like a rough and tumble)

Social stress recognition

In the absence of these behaviours, cats may be merely tolerating one another. Many people think that a cat must be friends or in the same social group in the absence of overt aggressive behaviour, such as fighting, hissing and growling. Cat behaviour is much more subtle, especially as aggression is a last resort when faced with conflict. Behaviours of cats not in the same social group include:

- 'time sharing' resources, eg one cat uses the sofa in the morning, another cat in the household uses it in the afternoon
- having separate territories in the house, eg a cat predominantly living upstairs and another cat living downstairs
- resource 'blocking', commonly litter trays, stairs, or cat flaps, where one cat passively blocks access to a resource emotionally
- one cat leaving the room or the house, if the other cat is around
- reduced use of space within the house
- the onset of medical conditions precipitated by chronic stress such as feline lower urinary tract disease, chronic skin disease and inflammatory bowel disease could indicate conflict between cats, especially with recurrent flare ups
- behavioural problems caused by social stress can be wide ranging including aggression towards cats, redirected aggression towards people or other animals in the house, overgrooming, inappropriate urination and/or defaecation, middening (strategically leaving faeces in an obvious location as a territorial marker), spraying, excessive hiding, reduced play behaviour, becoming either extra clingy with owners or aloof, anxiety related scratch marking, and under or over-eating

In the rescue environment

Cats Protection has a policy regarding not mixing cats from different sources (ie different households) together in the same pen or foster room for both infectious disease control and behavioural reasons. This is in place to promote good cat welfare. Where cats are fostered in branches, Cats Protection cats should not mix or have contact with the fosterer's own cats, again for the reasons previously mentioned. Mixing unrelated cats is an unnecessary stress and may manifest as subtle behavioural changes, such as hiding, obesity, toileting problems or overgrooming, or medical issues such as inflammatory bowel disease or urinary tract disease, either now or in the future.

Similarly, the policy also discusses that cats should not be allowed to roam outside their clearly defined pen or foster environment, to avoid a number of potential hazards. Cats are much better served by enriching their environment and finding them new homes as quickly as possible. It is much better welfare for the cats and also allows Cats Protection to help more cats in the long run (for Cats Protection branches and centres, see CatNav for more information).

Multi-cat enclosures where domestic cats are allowed to mix do not meet the cats' behavioural needs. These sorts of structures can cause stress to the cats. It should be noted that while the signs may appear to be subtle and therefore easily overlooked, it can be a significant welfare problem.

A question that is regularly asked is 'How many cats can live in a home?'. Even if an example of a twobedroom house is used, there is no set answer on how many cats are too many. For some cats that are particularly territorial or not sociable with other cats, then a total of two cats in a household would be too many for those individual cats. In contrast, other cats may be very sociable and can live happily with others. The number of resources (appropriately spaced) around the home can impact on the relationships between the cats as well as the amount of territory available to the cats including vertical space. Any underlying tensions between the existing resident cats is considered when homing Cats Protection cats as an additional cat can easily tip the balance and cause significant stress and conflict. Cat welfare must come first.



Hoarding

Cats Protection, like many other charities in the UK, is at times called upon to assist with households that are hoarding cats. Animal hoarding is the keeping of animals in multiple numbers, where the 'hoarder' fails to provide a minimum standard of care in relation to food, hygiene and health. Hoarding is a symptom of a mental health disorder and has recently been medically recognised as an obsessive-compulsive disorder (OCD). Animal hoarders do not recognise their failure to provide and will obsessively try to maintain or increase the number of animals they have. They tend to show excessive emotional attachment to their animals and view them as a family member, often believing they possess special abilities to communicate with their animals. Sadly, cat welfare is compromised in every case with a failure to meet the five welfare needs.

From a behavioural perspective, cats from hoarding situations are unlikely to have been provided with appropriate resources. In some cases, cats may not have been given any litter trays or outdoor access, so understandably these cats may show inappropriate toileting behaviour. Cats that were born into a hoarding situation may not have received adequate handling during the socialisation period (see 'Kitten socialisation' section for more information). As a result, they may be fearful of people and close proximity to people could seriously compromise their welfare.

Sociability towards other cats varies between cases. Some cats may actually be more sociable than the average cat, whereas others may be so overwhelmed and chronically stressed by the presence of other cats that they are best rehomed by themselves. Stressrelated issues from both a medical and behavioural perspective are common. Cats may urine spray, overgroom, show aggressive behaviour or hide constantly, for example. Each cat's requirements need be assessed on a case by case basis (see *The Welfare Guide* for more information on hoarding).

Loss of a companion

Some owners can be concerned that their cat may be grieving. Animal grief is not a well understood area. Cats that seem to grieve are often described as appearing to search for the missing pet or are more restless, they may become increasingly clingy with their owner and can vocalise more than usual. Anecdotally, in some situations, it can help an animal to see and smell the pet that has died or been euthanased. This may help to prevent searching behaviours for animals that are no longer part of the household. However, all animals and owners are individuals and this is not necessarily appropriate for everyone. On the whole, cats showing signs of grief are quite rare. They are more likely to appear indifferent to the loss and some cats even seem happier.

Following the loss of a companion, it can help the remaining cat if they have a consistent predictable daily routine, regular play sessions and ensure that they have all their essential resources, especially somewhere safe that they can retreat to and hide if they want to such as an igloo style cat bed, or a cardboard box on its side. A pheromone diffuser such as FELIWAY® *Optimum* may also help at these times.

It is very common to over-lavish attention on to a cat in difficult times as a way of trying to comfort them as we may do with other people, but unfortunately from a cat's point of view this can be confusing as the owner is acting differently, or in some cases can lead to an unhealthy overdependence on the owner.

If owners need support during this difficult time, we would recommend seeking out the Paws to Listen grief support service. Losing a pet of any kind is a painful experience and our trained volunteer listeners run a free and confidential service offering emotional and practical support. For further information, please go to www.cats.org.uk/grief





Integration

When rehoming a cat, it is important to consider that cats don't need friends and are quite happy to live as the only cat in the house. Many cats living together under the same roof only tolerate the presence of other cats. This can be very stressful, but isn't always obvious, especially as cats often spend time together to access food, water, toileting areas and the outdoors. However, many owners want to own more than one cat. Where possible, advise owners to adopt two kittens from the same litter or two adult cats in the same social group. For people introducing a new cat into the household, it needs to be done carefully and slowly for the best chance at a successful integration.

If cats are forced together too quickly, it may lead to lifelong conflict which is difficult to resolve. Although a cat might have lived with another cat in the past, this does not mean that they will tolerate a new cat immediately – each relationship is specific to the individuals and ensuring a gradual introductory period is critical.

1) Give the new cat a room with food and water, somewhere to hide and a litter tray where they can get used to their new home in peace. Try to make sure this area is away from where the existing cat naturally spends a lot of time. The owner should take the new cat straight to this room when they arrive home without coming into contact with the existing cat. Installing FELIWAY® *Optimum* diffusers can help to make the atmosphere more relaxing and should be plugged in 24 hours before arrival.

2) Smell is important when distinguishing friend from foe. Scent transfer should take the greatest portion of the overall process and yet it is one that is often rushed or not considered at all. Collect the pheromones from each cat on separate clean cloths by carefully rubbing it on the cat's scent glands such as cheeks, forehead and sides. Swap the cloths, so that they have the cloth smelling of the other cat. By placing it in the middle of the floor rather than presenting to each cat, you give them choice. If the cat approaches the cloth, sniffs it and then ignores the cloth, this is a good sign. Reward the cat with a couple of small tasty treats for this calm reaction to the cloth to help them form a positive association with the other cat's pheromones. Conversely, if the cat skirts round the edge of the room to avoid the cloth then scent swapping needs to continue until both cats are ignoring the cloths. The pheromones will fade over time so these should be 'topped up' once a day.





3) When the new cat has settled in (which can take weeks for some cats), it is advisable to make introductions to the existing cat from behind the safety of a solid barrier such as a glass door. Choose somewhere where either cat can escape to another room, have places to hide and jump up high if they want to. Allow the new cat to explore the room first without the resident cat around so that they can 'get a lay of the land' by learning the layout of the room, taking note of the hiding places and escape routes and are able to retrace their steps back to their sanctuary room if necessary (this will help to reduce their stress levels when they do first meet the resident cat). Position the cats as far away as possible from each other. Continue to use a small amount of treats or interactive fishing rod toy play to help the cats form positive associations with one another. Keep all introductions short and sweet (just five to 10 minutes at a time).

4) If possible, it helps to progress to using a mesh barrier that facilitates scent exchange but still provides a safety barrier. If at any point the cats feel stressed by the other cat, then it is best to go back a step or even back to scent swapping.

5) After multiple sessions involving barriers whereby both cats are calm, it is finally time to introduce the cats to one another face to face. Cats are very good at picking up on people's emotions so the owner needs to stay as calm as possible to help the introduction process. If the owner notices any such negative signs, such as staring, tense body posture, dilated pupils or ears turned to the side, they should intervene by holding up a thick towel between the cats. This barrier helps the cats to break eye contact if they are staring at one another and allows them to escape. Hands or feet should never be used to break up a cat fight to avoid bites and scratches. Also, cats should not be picked up if they are stressed as they may redirect their aggressive behaviour in the heat of the moment.

6) Once both cats are relaxed, gradually increase the amount of time that the cats spend together supervised.

7) Be prepared to be patient. Should there be any negative reaction separate them immediately and go back a step or more. Bear in mind it is often a slow process which will take weeks or months rather than days but the time taken will be worth it to ensure the cats' welfare. If any problems are encountered, help should be sought sooner rather than later as it may be easier to resolve in the early stages.

For more information visit <u>www.cats.org.uk/dogs-and-other-pets</u> and <u>www.cats.org.uk/introducing-cats</u>

Top tips

- Litter mates are more likely to get along, but this is not always the case, once they reach social maturity they can start to grow apart. Generally the sex of the cat doesn't affect whether they will get along or not. It depends more on their socialisation as young kittens (eg whether they had friendly encounters with other cats or even the scent of another cat), personality, previous experience and if they have any medical conditions affecting their tolerance of other cats
- Cats may choose to live in different parts of the house. If this is an acceptable relationship to them, and neither cat seems to be suffering, then it should be acceptable
- From a cat's point of view, another cat poses a threat to their food and other resources. To reduce this feeling of competition, make sure there are plenty of places to sleep, eat, drink and go to the toilet that can be reached without having to pass another cat. Don't aim to have both cats eating together as this can be stressful for them. Even cats in the same social group would benefit from eating apart from each other
- Hidey-holes mean cats can retreat if ambushed cardboard boxes with holes are ideal. It can be a good idea to put retreats on the routes to food or litter trays as many cats like to sit up high
- Despite careful introductions, some cats never learn to be friends or tolerate one another, and may prefer to live as the only cat in the household. Personality differences play a great part in all social interactions and cats are certainly no exception to this rule

Travelling with cats – from a trip to the vets to moving home

Cats are creatures of habit, and any change in routine or environment can prove to be a very stressful experience for them. In an ideal world, travel with cats is best avoided, but in reality on occasion there will be little option other than to do so, be it for a trip to the vet for annual vaccination, to the cattery when going holiday, or in the event of a house move.

Should travel be unavoidable, there are some simple steps that can be taken to help to minimise any stress or anxiety that cats will inevitably feel.

A decent cat carrier

There are a variety on the market, and the type of carrier used may depend on the circumstances. In general, cat carriers that are both top loading and side or front loading are ideal, as it is easier to place the cat into the carrier, and are extremely durable. It is also very helpful if the top half of the carrier unclips and can be removed completely, so the cat can remain in the bottom half, during a vet consult for example. Always use a strong and secure cat carrier and make sure it is of an appropriate size for the cat so they can turn around and lie down comfortably. Carriers should be regularly checked to ensure that they are safe and secure with no broken or missing parts. The carrier should be easy to clean as 'accidents' can and do happen in transit (so avoid wicker carriers) and with that in mind it is always a good idea to line the carrier with absorbent bedding such as newspaper, towel, Vetbed® or an incontinence pad for this reason.



Surround cats with familiar sights, sounds or smells

Much of a cat's sense of security is derived from being surrounded by familiar sights, sounds and scents. To help, whenever cats are moved, familiar possessions such as toys, unwashed bedding or even an item of an owner's clothing may be placed in the carrier with them. If time allows, introduce the carrier into their normal environment well in advance of travel and make it as pleasant a place to be as possible, leaving it open and accessible for the cat to explore. Cats can be trained to form positive associations with cat carriers using clicker training (see 'How cats learn' section for more information).

Pheromone sprays and diffusers

Pheromone sprays such as FELIWAY[®] *Classic* have been shown to greatly reduce stress levels and promote a feeling of relaxation. They can be sprayed onto fabric bedding, toys and even in the car. Pheromone sprays should be used at least 15 minutes before travel to allow time for the alcohol in the spray to evaporate.

Calming/travel medication

Any concerns regarding travel can be discussed with a vet. Vets will be able to offer advice on any additional measures that may be taken to make the travelling experience more pleasant for a cat. There are numerous products that are available, (either by prescription or over the counter, complementary or pharmaceutical) that may help in reducing the level of stress experienced. It is well worth bearing in mind that many require use in advance of travel to be effective (see 'Cat handling' section for more information).

Top tips for travelling with cats

- Always plan the journey make any journey as short as possible by minimising the distance. Reducing the time spent travelling by avoiding traffic congestion will inevitably reduce any stress experienced. Try to travel during the cooler part of the day in the height of summer
- Secure the carrier appropriately not only for the protection of the cat, but to ensure compliance with the Highway Code which states "it is a driver's responsibility to ensure that animals are suitably restrained so they cannot cause a distraction while driving or injure you should you have to stop suddenly." Make sure any opening on the carrier can be closed securely without the possibility of coming open mid transit
- Be prepared carry spare bedding for long journeys so that it can be changed should it become soiled. Always ensure there is adequate ventilation
- Cover the carrier when anxious, cats often choose to hide, so cover the carrier with a light blanket or commercially available cover while ensuring adequate ventilation, especially if travelling with more than one cat at a time
- Calm environment drive smoothly and avoid braking sharply. Turn the radio off or only play quietly as background noise, depending on the cat

Top tips for improving welfare at the vets

- Where possible, try to get an appointment (eg for routine things like vaccination) at a quieter time of day or see if the veterinary practice has 'cat only' times for appointments
- Always place the cat up high to help them feel safer, either on a table or designated cat shelving for cat carriers, or simply place the carrier on your lap
- Sit away from other animals, particularly dogs, in the waiting room. If it's very busy, speak to the receptionist about other options, such as a spare quieter room or sitting in the car with the cat (as long as it's not too hot) until it is time for the appointment
- Avoid other people's dogs sniffing cats in carriers, and politely speak to dog owners if this happens
- Keep the carrier covered with a towel and the carrier doors shut
- Talk to the cat in a soft, soothing voice if beneficial to the individual cat
- Carry the cat carrier securely so that it doesn't swing or accidentally knock into anything
- Take a list of any behaviour changes noticed (plus any video footage that might help) and things to discuss with the vet so you can provide a more thorough history and nothing is missed
- In the consultation room, allow the cat to walk out of the carrier at their own pace, or unclip the top half of the carrier and partially cover the cat with a towel to make them feel safe and hidden

Returning home after a trip to the vets

As cats identify others in their household predominately through their scent profile, there can occasionally be issues when a cat returns home from the vets. This may be due to a change in scent profile which is affected by scents (such as disinfectant) from the veterinary practice. Cats that are missing from the group for any length of time may initially be rejected until they have the 'right' profile again. This is why it can be useful in multi-cat households to rub a recently absent feline family member with a towel that has been rubbed over the other cat members of the family. The fact the cat has the 'right' profile can speed its acceptance back into the group. A synthetic feline pheromone analogue such as FELIWAY® *Friends* or FELIWAY® *Optimum* diffuser can also be used for this purpose.

Moving home

Moving home is not only one of the most stressful times for a person – cats find moving house extremely stressful too. Much of their feeling of security comes from being able to surround themselves with familiar sights, scents and sounds. Moving home means moving territory and for that reason it is even more important to plan well in advance of any house move wherever possible.

Cats may be placed in a cattery while the removals process gets underway. Book well in advance and ensure any vaccinations are up to date prior to entry into a cattery. If a cat must remain at home for the duration of the move there are a few tips to follow that will hopefully reduce any anxiety or stress felt.

Prior to the move

If possible, set aside one room of the house that can be cleared of boxes, possessions and furniture at least a week prior to the moving date to be the cat's 'sanctuary room'. This should allow the cat a safe secure place where they are not constantly disturbed by packing and moving. Make sure they have as many of their familiar possessions with them as possible to emphasise their feeling of safety and security. It is a good idea to feed them in that one room and provide all necessary resources such as beds, food and water bowls, litter trays, scratching posts and toys as well as somewhere for them to retreat and hide. For more than one cat, make sure each one has a separate set of resources. Where cats don't enjoy each other's company, it may be better to give them separate 'sanctuary rooms'.




The use of a synthetic facial pheromone such as FELIWAY[®] *Optimum* will help to create a reassuring environment and may reduce levels of stress.

Cats that enjoy outdoor access should be confined in the 'sanctuary room' the night before the move – just in case they go missing before the move itself.

Moving day

When moving day finally comes around, keep the cat in the safe environment for as long as possible so that they are protected from all the commotion of moving larger possessions. When it is time to leave with the cat, put the cat in the carrier with a few of their favourite belongings and bedding for scent continuity. The advice regarding travelling with cats given above should be followed where possible. In the new home, try to replicate the features of the secure room that was created at the old house. Again, confine the cat to that one room at least until the majority of the move is complete and the removals team have left, but preferably for the next few days, as having access to the whole house straight away can be overwhelming. Make sure everyone knows which room has been designated for the cat by putting a sign on the door so that they can be left in peace and are not allowed to accidentally escape. When it is time to allow them to venture further and explore their new territory, make sure the windows and doors are closed and that they have access to their 'sanctuary' at all times.

Don't forget to change your cat's microchip details including the address and telephone numbers registered with the central database!

Heading into the great outdoors

It is very important not to let the cat outside until a period of at least three weeks has elapsed after moving. Cats need this time to start to feel relaxed and secure in their new environment and build up a scent profile in their new surroundings.

Before letting them outside, owners can practise calling their cat to them within the house and rewarding them with a small treat. To do this, start with the cat close by in the same room and gradually build up the distance over time.

When the time comes to letting the cat venture outside initially do so only for short periods and with supervision. Start just before a meal time so that hopefully their favourite food will tempt them back in should they become over-adventurous! Remember to leave the door open so that the cat can retreat inside whenever they feel insecure and only let them outside for longer periods when they have built up the confidence to come and go as they please (see 'How cats learn' for more information on cat flaps).

For more information, check out the moving home section of our website **www.cats.org.uk/moving-home**



Indoor and outdoor cats

Cats have a natural tendency to explore so allowing them access to the outside world gives them mental stimulation and reduces stress. Ideally all cats would have access to the outdoors to express their natural behaviours. However, there are some circumstances where cats may have to live an indoor lifestyle, and some cats may choose to spend most or all of their time indoors.

There's a variety of benefits of being allowed to go outside.

- A bigger territory allowing cats outdoor access not only increases the space available to them, but also the variety of environment
- Natural behaviour cats with outdoor access are able to express their natural behaviour and can do so in a setting that is more 'acceptable' to humans. For example, scratching and spraying are normal behaviours for cats and these traits often go unnoticed by owners of cats that have outdoor access

- Hunting cats can help to keep unwanted rodents at bay as well as express important natural cat behaviour. The hunting sequence of stalking and catching prey actually releases endorphins or 'happy hormones' in the cat's brain. Hunting behaviour is not influenced by hunger – many cats with ample food will still want to hunt
- An interesting environment the outdoor environment is a complex mix of different smells, sights, sounds, tastes and textures that is constantly changing. It is particularly stimulating and interesting for the cat's extraordinary senses and provides them with an important mental workout
- Exercise cats with outdoor access are able to exercise more readily, either through hunting, climbing trees and fences or simply by having the extra space to utilise. Cats have great agility and engaging in a variety of different types of exercise helps to keep their muscles toned. Active cats are much less likely to become obese and suffer from associated health problems

• Ability to escape from the household if necessary – there are occasions when cats need personal space and the ability to escape from anything that they perceive as stressful, or a threat

The benefits to indoor-only cats include:

- less risk of injury or harm from a road traffic accident, fighting, poisoning and less risk of encountering infectious disease or parasites
- less risk of getting lost

There are many ways in which the risk of letting a cat outdoors can be minimised:

- keep cats indoors at night to protect them from road hazards
- cats should be microchipped this is a permanent means of identification and will greatly increase the chance of being reunited should they go missing
- cats should be neutered to reduce roaming and fighting
- cats should be treated regularly for fleas and worms and vaccinations should be kept up to date

It is recommended that some cats are kept indoors for their own benefit, such as blind cats or those with a medical condition such as FIV (if they can cope with being indoor only). Cats that are kept solely indoors may suffer from frustration if they are unable to exhibit their natural behaviours and may struggle with confinement. The outdoor environment provides so much more for cats than simply a place to exercise and these benefits should be replicated inside. That includes providing appropriate places for cats to scratch, hiding areas and high resting places where they can feel secure and interesting areas and objects for them to investigate.

Key aspects of the natural environment

Whether cats have outside access or not, it is important that all cats are provided with a suitable environment that allows them to express their natural behaviour. Indoor-only cats can have a simulation of various key aspects of the outside world, and all of the following points need to be accessible to the cat.

- Vertical height cat shelving, cat trees etc
- Feeding enrichment
- Interactive play sessions incorporating the cat's preferred play style (eg across the floor, in the air etc)
- Choice, control and predictability
- A small element of novelty eg rotating toys to maintain interest
- Sensory interest eg feathers from outside to investigate
- Plenty of resources to express natural behaviour, eg scratch posts, litter trays
- A quiet space to sleep
- Hiding places
- A space to avoid others, or retreat to if necessary

In multi-cat households, plenty of opportunities to eat, drink, toilet, rest and hide should be provided, in different locations by following the golden rule of one resource per cat plus one extra can help to reduce conflict and potential behavioural problems.

While there will be individual differences, it is worth noting that in general, cats that have been indoor-only and are then provided with a gradual introduction to outside cope and adapt much better than a previously outdoor cat (particularly stray cats or those spending a large proportion of their time outside) trying to adapt to an indoor-only lifestyle. When rehoming an outdoor type cat, they will cope best by having their previous outdoor lifestyle replicated in their new placement.

Overall, the decision on whether to keep a cat inside or allow access outdoors should be assessed on the cat's personality, health, previous experience, the home and local outside environment. Cats kept solely indoors should be provided with ways to exhibit their natural behaviour to ensure their welfare, reduce dependency on owners and avoid undesirable behavioural issues (see 'Essential resources and placement' and 'Essential resources and settling cats into rescue care' sections for more information).

Kitten care

Behavioural development

Kittens do not stay young for long and the correct care in the early weeks and months can help them behave in a way that is best suited to being a pet, leading to a lasting relationship with their owner.

Kittens learn what is normal and safe during a very sensitive period of development that occurs between two and seven weeks of age, known as the 'socialisation period'. During this time, kittens' brains and sensory systems are still developing, and the things they see, hear, touch, smell and taste affect how this development occurs. This allows young cats to quickly understand what is normal about their world and what they should avoid. See 'Kitten socialisation' and 'Feral kittens' for more information.

If a kitten has been raised with their mother, it is recommended that they stay with her until they are at least eight weeks of age so they can learn from her. For more information visit <u>www.cats.org.uk/</u> <u>help-and-advice/pregnancy-and-kitten-care</u>

Hand-reared kittens

There is currently a lack of scientific evidence regarding the most effective way to hand rear kittens in order to produce well-rounded adults. Anecdotally, it is thought that there is an association between hand rearing and frustration-related aggressive behaviour. Kittens would normally learn to deal with frustration from their mother during the weaning process when she gradually removes access to her teats. Feeding the kittens in a different order each time and not feeding the loudest kitten first may help the kittens to manage their expectation levels. In addition, to avoid the kittens becoming overly dependent on people, it may help to gradually phase the kittens onto activity feeders and incorporate elements of play during feeding time such as using a fishing rod toy to encourage kittens towards food bowls or feeding enrichment items.

Another important lesson for kittens is learning bite inhibition (eg not biting too hard), generally learnt from their mother and siblings. Mouthing is a common kitten behaviour, similar to puppies.



For lone hand-rear kittens, caregivers should be mindful of their hands (and sometimes feet) to avoid giving the kitten the opportunity to bite them. If the kitten does accidentally nip the hand, then try to distract the kitten with a toy or if they are quite relentless, then walk away and end the play session. Do not tell the kitten off as they won't understand and it may damage the relationship.

One kitten or a pair?

This is often a personal decision for owners, based on their lifestyle, home and surrounding environment, the cat density of the local population, the extra expense of having a second kitten and personal preference.

If you are thinking of getting a pair of kittens, a sibling pair is often preferable to two unrelated kittens and character is more important than gender. If you are looking for a family pet for a busy home, look for a kitten that is alert, keen to approach visitors and playful with their littermates. Be aware that the quiet one may potentially grow up to be an anxious or more fearful cat. This is fine if you are prepared to care for this type of cat and cater to their needs, but they may be less suited to a busy or noisy household.

Although two kittens homed from the same litter may remain sociable with each other as they approach adulthood, it is important that they have access to separate resources, such as litter trays and food bowls. Kittens may grow apart as they approach social maturity between 18 months and four years of age, so will need their own territory and resources to avoid conflict. For more information, visit **www.cats.org.uk/other-cats**

Kitten essentials checklist

Making kitten-related purchases is part of the fun, especially when it comes to choosing them new toys to play with. Before caregivers begin buying novelty items and expensive treats, here is a list of essential things that kittens will need before they arrive. It's important to remember the golden rule of one resource per kitten, plus one extra.

- A food bowl
- A water bowl placing the water bowl away from the food bowl encourages cats to drink
- Food and water ideally, continue feeding your kitten what they are used to, this will help them settle into their new home

- A soft, comfortable bed and blankets
- A litter tray (with cat litter that they are used to using), placed away from their eating area
- A sturdy adult sized (not kitten) scratching post
- A cat brush to keep their fur groomed
- A cat carrier something well ventilated and sturdy
- New toys and games a fishing rod toy is the perfect choice for energetic kittens
- Plenty of safe hiding places cardboard boxes, igloo beds etc

Encouraging appropriate play

A common reason for cats showing aggression towards people is due to learning at a young age that this is a good way of interacting. During normal development, kittens start to play with each other at four weeks old, as a way of practising hunting. Between five to six weeks of age, kittens will show hiding and searching behaviours that are either directed at another kitten or an object in their environment.

Direct object play starts a little later and is particularly noticeable between seven and eight weeks of age. To start with, kittens play with all sorts of objects, but as they develop, mothers provide opportunities to direct their kittens' behaviour towards appropriate prey items. Object play helps kittens to develop their balance and eye-paw coordination. Social play, including chasing behaviour, continues until it peaks at approximately 12 to 14 weeks. It is therefore very important for kittens to be given appropriate toys to direct these play behaviours towards, such as ping pong balls, toy mice, fishing rod toys and Kickaroos[™] (made by Kong).

Caregivers often make the mistake of playing with kittens with their fingers or by moving their feet around under the duvet. Although this may be fun with a young kitten, it can start to direct play or predatory behaviours towards the owner, which may be painful as the kitten becomes an adult cat.



Elderly cats

There is no specific age at which a cat 'becomes senior'. Individual animals and body systems age at different rates, but one convenient way to view older cats is to classify them according to the International Cat Care life stages chart as 'mature' (7-10 years), 'senior' (11-14 years) and 'super senior' (15+ years). Many cats can now live into their late teens and some into their twenties as a result of general improvements in diet, healthcare and husbandry.

However, with age comes a series of inevitable biological changes which can not only impact on the body but may also affect the behaviour of an elderly cat. Older cats are not only more vulnerable to illness, they may experience a reduced ability to smell or taste food, suffer deterioration in hearing and vision, have a reduced ability to digest fat and protein and have a lower tolerance of stress, all of which can manifest in a change of behaviour.

Some of these conditions can be alleviated by medical intervention but all of them can be made less impactful by making simple adjustments to the cat's environment.

Changes associated with ageing

- Altered sleep patterns
- Decreased hearing
- Decreased sense of smell
- Reduced stress tolerance
- Decreased digestion/absorption of fat and protein
- Joint disease
- Decreased skin elasticity
- Brittle nails, less ability to retract claws
- Altered social interactions
- Reduced immune function

Behavioural changes

Some of the physiological changes of ageing can affect an older cat's behaviour. Sometimes, changes can be subtle and not easily recognised. The most important thing is not to simply assume the change is 'just old age' and nothing can be done to help. An owner may notice that as their cat gets older, the cat may seem less active and spend more time sleeping.

They may be less interested in play or grooming. They may become more vocal and seem more insecure, preferring to spend more time closer to the owner or to the safety of the home. As cats age, they can also become increasingly picky eaters and many may have a reduced appetite.

Some of these changes may arise as a result of an underlying disease, and regular vet visits are advisable for older cats. Senior cats should be seen by the vet at least every six months and more frequent visits may be recommended on veterinary advice.

If a recent change in behaviour or overall health has been noted, an examination by the vet is recommended as the first step. Where possible, it is a good idea to collect video footage of these changes, and in particular take a video of the cat walking up stairs to help the vet with gait analysis and looking for signs of arthritis.

Cognitive disorders

Brain ageing in cats can eventually lead to a degeneration of brain function, known in veterinary medicine as 'cognitive dysfunction'. The onset of signs tends to be very gradual, so gradual in fact that many owners may fail to recognise it is happening.

Typical signs of cognitive dysfunction include wandering, vocalisation, toileting outside the litter tray or frequently using the tray due to forgetting it's just been used, disorientation and increased nighttime activity. In order for cognitive dysfunction to be diagnosed, other disease processes that can result in these signs must be ruled out by a vet. It is similar to some forms of dementia in people.

There are no known cures for cognitive dysfunction, but various interventions such as changes to diet, environmental management and some drug therapies may help to improve quality of life. Vets can offer advice on which measures may be taken to best fit a cat's needs.

Improving the life of an eldery cat - top tips

Small adaptations may be needed in the home to make life easier for an older cat.

- Stairs may become difficult to negotiate, so try to ensure a set of all the cat's resources are available on each level
- Remember that wood and laminate floors can be more slippery for older cats who are unsteady on their feet and keep claws trimmed to avoid them catching on carpet
- Open litter trays with low sides may be easier for an elderly cat to negotiate
- Ensure there are plenty of litter tray options located close at hand to make using the litter tray an easier prospect
- Place night lights next to important resources such as litter trays, water bowls and food bowls so they are easier to find at night
- Horizontal scratching posts may be more favourable for arthritic cats, so a choice of scratching facilities should be made available
- Ramps and steps may be useful to help older cats access their favourite look-out spots and sleeping areas
- Often older cats can become fearful of going outside as they feel they can no longer successfully defend their territory against other cats. Securing the garden against the encroachment of other cats will help the cat to feel safer when spending time outdoors. Older cats generally become less tolerant of stress. A predictable routine is important to allow the cat to feel a greater sense of security
- Ensure that a quiet rest area is always available for the cat to retreat to, especially in the event of changes in the household such as redecorating or the arrival of visitors
- Ideally a familiar cat sitter may be preferred who can care for the cat in their own home, when the owner is on holiday



Common behavioural problems

Managing cat behaviour

Vet check and its importance

As many behaviour problems can potentially be related to underlying medical conditions, it is important that any cat with a behavioural issue should be seen by a vet for a full health check. Even if the cat has already had an initial health check by the vet as part of the admissions process, it is important that the cat has another health check after the behavioural problem has started and that the vet is made aware of the behavioural issue. A full clinical examination should be performed by the vet. Further testing may need to be done, depending on the findings during the examination. These may include urine tests, blood tests (eg in older animals), a more detailed neurological exam or even x-rays to rule out any underlying causes. The behavioural effect of any potential environmental stress needs to be considered as well.

Once an underlying medical problem has been ruled out as the cause of the behaviour in question, the vet may suggest a referral to a qualified behaviourist. They can put together a behavioural plan for the individual cat in question.



Psychopharmacology – evidence based

Many medications used in behavioural medicine are unlicensed for veterinary use and will be used 'off-label' and only after informed consent has been given. Medical treatment can only be prescribed by a vet and should be done after communication between the vet and the attending behaviourist. Decisions regarding any medicines should be based on scientific evidence for that particular drug to ensure the safety and efficacy thereof.

Any medication prescribed should be used alongside behavioural modification techniques. Concurrent behavioural therapy is needed to deal with the learned component of the behaviour and also to address the cause of the condition.

Complementary medicine/ alternative treatments

It's important to remember that alternative therapies, which include pheromone products, food supplements, herbal remedies and other non-pharmaceutical therapies, are not subject to the same rigorous testing that pharmaceuticals including psychoactive medication undergo. For example, there is no obligation to publish all trial results ie negative as well as positive findings and there is no legal requirement for independent scrutiny or scientific proof of efficacy for these products.

As such, for a lot of alternative medications, there is little or no scientific evidence to support that they are effective. It is important to note that therapies regarded as alternative or 'natural' are not necessarily effective or in fact harmless. Complementary therapy is not an alternative to a conventional and thorough assessment of the patient. If physical causes are missed and any appropriate treatment is delayed, recovery will take longer and the cat's welfare will be compromised.

Pheromones

Pheromones are chemical signals used by animals in communication. Evidence-based data shows that they are effective in aiding treatment in a variety of anxietybased disorders in cats.

The advantage of synthetic pheromones is that they don't require oral administration. Instead, they can be sprayed onto specific sites and surfaces or diffused into the air in the cat's environment.

As they are generally speciesspecific, it is important to use cat specific products, backed by scientific evidence to ensure their efficacy.

These treatments have no known contra-indications (situations when they shouldn't be used) and adverse reactions appear to be rare.

See 'Pheromones' section for more information.

Management – teamwork ensures best outcome

To ensure the best outcome for each and every cat with a behavioural issue, it is important to remember that 'teamwork does it'. It is vital that there is good communication between everyone involved in the care of the cat to continually monitor any progress. This needs to be fed back to the behaviourist/vet so that the management plan can be adjusted as needed to maintain the best care for each cat both while with Cats Protection but also once homed.

Stress

Stress is a response to a real or perceived conflict or threat. Its function is to trigger an appropriate response so a cat can cope with a situation and return to its normal state Stress is considered normal in the short term if the cat is able to respond appropriately using the 'flight or fight' response. This short-term stress can also be called 'acute stress'. Stress is harmful if it continues in the longer term or the animal is unable to cope or respond in a way that brings it back to a normal state, known as 'chronic stress'. In such cases, chronic stress is detrimental because it affects:

- the way the cat feels emotionally, leading to suffering
- the cat's behaviour, which in turn may affect the cat's relationship with others
- the cat's physical body and health chronic stress affects many body systems
- all of the above can affect the cat's quality of life and wellbeing

There are strong links between behaviour, stress and disease.

• Stress can result in both behavioural problems and physical health conditions/disease, for example:

- infectious disease – chronic stress suppresses the immune system and so may lead to a worsening of an existing condition, recurrence of a previous condition, increased susceptibility to infectious diseases in other cats/people/ animals or increased shedding of infectious agents, putting other cats/people/animals at risk



- the onset of diseases can be aggravated by chronic stress such as feline lower urinary tract disease (such as cystitis), skin disease, inflammatory bowel disease and hormonal conditions such as hyperthyroidism or diabetes

- the development of abnormal self-directed behaviours, such as overgrooming or mutilation

- it can even be a contributory factor to over-eating and obesity
- Conversely, behaviour changes or problems may be as a result of pain or underlying disease
- Behavioural problems, such as cats showing aggressive behaviour, may limit the ability of employees, volunteers and vets to examine cats properly to identify abnormalities, diagnose quickly or treat appropriately or medicate with ease

Harmful stress or 'distress' can also make a cat more affected by any further unpleasant experiences and less aware of nice ones. Cats suffering from stress experience negative emotional states such as anxiety, fear and/or frustration. Some cats suffering from chronic stress can become depressed, which is a significant welfare problem. Stress prevention and reducing exposure to things that cause feline stress is therefore very important for those responsible for caring for cats.

Entering Cats Protection care is a stressful situation for most cats. Not only does stress negatively affect cats' welfare, it can make them harder to home and reduces the effectiveness of the immune system, making them more susceptible to disease. For these reasons it is extremely important to minimise the stress experienced by cats while in care.

Signs of stress

Cats will experience different levels of stress and will react to stress in different ways. It is influenced by genetic and prenatal effects such as how bold the father is and whether the mother suffers stress during her pregnancy, experiences during their socialisation period, personality, previous experience and medical conditions.

Signs of stress can involve inactivity, immobility and not showing normal 'maintenance behaviours' such as eating, drinking, toileting, grooming and sleeping. Often cats that are stressed have dilated pupils, will be very tense and still, can have sweaty paws and in extreme cases may pant. These cats are termed 'passive responders', whereas other cats may show a more active response, such as trying to hide, climbing, trying to escape, or showing aggressive behaviour. These cats are known as 'active responders'.

Stress can be difficult to decipher as many of the signs closely resemble signs of pain as can be seen in the list below. This highlights the importance of getting the cat health checked by a vet to rule out medical reasons. Other signs of stress include:

- being withdrawn or hiding more than usual
- sleeping more than usual some cats will feign sleep while trying to monitor their environment
- constantly watching their environment and being vigilant
- being easily startled or appearing quite jumpy
- becoming less tolerant around people/other animals, or being less tolerant of being handled

- showing aggressive behaviour
- hesitating or becoming more reluctant to use important resources eg only eating or using the litter tray at night
- crouching in a hunched up position with squinty eyes – some cats may cringe away as people approach
- reduction in play behaviour and interaction with people
- reduction in eating or drinking behaviour
- over-eating
- sleep disturbance
- pacing, circling or restlessness
- undergrooming where the coat becomes scruffy or matted or overgrooming where areas of fur may be missing
- house soiling such as inappropriate toileting or spraying

Causes of stress

While the causes of stress will vary depending on the individual cat, there are common themes that affect many cats. Cats thrive on routine and therefore generally struggle with change. A change of environment by coming into rescue care, going to a boarding cattery or a trip to the vets are all stress inducing situations. Even situations which are positive from our perspective, such as leaving Cats Protection care to go to their new home, are another change from everything the cat previously knew and the cat doesn't know what to expect. Some cats will find simply changing pen stressful. Some owners can feel disappointed if they thought the cat would be 'grateful for being rescued' and instead is

hiding under the bed while they try to adapt. Cats do not feel gratitude as far as we know, and certainly have no concept of our good intentions. It is very important to empathise and view the situation from the cat's perspective. Cats need to be able to adapt at their own pace and caregivers should put stress reduction measures in place to facilitate this.

Cats should be monitored regularly to ensure they are adapting to their new environment. Cat stress levels can be measured scientifically and objectively using a tool called the 'Cat-Stress-Score', originally developed by Sandra McCune. It encompasses body postures and behaviours to create a score. For example, a modified version was used in the research looking at the effect of hiding enrichment on stress levels in Cats Protection cats. All observations should be recorded and veterinary and behavioural advice should be sought for those cats that remain stressed for a prolonged period. In addition to daily observations, assessing stress should form an integral part of a welfare assessment for all the cats within an animal welfare organisation (see The Welfare Guide and the Cat Care Guide).

Once cats have adapted to the new environment, they will start to interact more and may begin to play. However, some cats may then become frustrated or bored because they are not free to behave as they normally would. For these cats, being provided with a variety of things to occupy them while in their pen and periods of play are important for their welfare (See 'Frustration and depression' section for more information).

Ways to reduce stress

There are a number of practical measures which can be implemented to prevent or reduce stress. Stress prevention and management is paramount to cat welfare in branches and centres. Below is a checklist of measures to help reduce stress.

- Hide provide a cat with somewhere to hide to help them adapt to the change of environment. Cats must always have access to a hiding place for the whole time they are in care, even if they seem confident. For particularly nervous cats, the more hiding places they have, the more secure they will feel. Providing a hiding place does not 'encourage hiding behaviour' – the cat would still feel the need to hide, whether there was a hiding place or not
- Elevated perch provide elevated areas which help to make the cat feel safe and create extra territory. Corner shelves are useful as the cat can monitor their surroundings safe in the knowledge that they cannot be approached from behind
- Avoid social stress cats from different households should not be put in a pen together. Where cats are relinquished together it is necessary to make sure that they get on before housing them together. Collecting more information prior to admitting the cat into care can help to create informed decisions (see 'Behaviour processes within Cats Protection' for more information). Cats also need to feel safe, away from other cats, so avoid close proximity to neighbouring cats in a fosterer's garden or other resident cats in the home
- Privacy solid, non-see-through sneeze barriers placed between each pen so the cats cannot see their neighbours are helpful for reducing stress. Frosted or clear barriers or panels are not sufficient
- Routine for many cats, having a regular, consistent routine with the minimum numbers of carers while in Cats Protection care helps reduce stress as they learn to predict daily events
- Consistent handling when cats are first settling into the rescue environment, most will benefit from minimal handling and interaction while they adjust. Some cats will need to be ignored completely so no eye contact or talking to them. Consistent and sympathetic handling practices will also make interactions with people more predictable and pleasurable
- Resources cats need appropriate resources in the right places with safe access to those resources. Even in the confined space of a pen, the resources can be placed separately (see 'Essential resources and placement' section for more information). This allows the cat to express their natural behaviours
- Pheromones the use of pheromones such as FELIWAY® can help to settle cats into care



Frustration and depression

Frustration

When cats first enter an animal welfare charity, they will undoubtedly all experience stress to some degree. After a period of time, cats will adapt at different rates to the new environment, particularly once they get used to the routine and can start to predict when they get cleaned out or fed. At some point, the confinement and lack of being able to express normal behaviours such as hunting behaviour can become frustrating for the cat, a bit like 'cabin fever'. Much of this depends on personality, such as how outgoing they are, and how well they generally cope with change.

Always be wary of the cat that seems very confident and settles into Cats Protection care within a couple of days. This type of cat is most likely to suffer from frustration much more quickly than one that is still stressed by the initial change of environment.

Cats can express their underlying emotion of frustration in a variety of ways; the most commonly reported being aggressive behaviour towards caregivers (see 'Aggressive behaviour' section for an overview of the topic). Cats showing aggressive behaviour as a result of an underlying frustration are likely to become highly aroused or over-excited easily. Keep an eye on the base of the cat's tail. If it fluffs out, also known as 'piloerection', then this can indicate that the cat is becoming aroused. Ultimately the most effective way to deal with frustration is to prevent it happening in the first place by rehoming the cat as soon as possible. Improving throughput and reducing a cat's length of stay within branches and centres will have an overall positive impact on cat welfare as well as making better use of limited resources. Once a cat has settled into care and their stress levels have reduced, frustration can also be prevented by providing the cat with simple feeding enrichment and regular interactive play sessions with different caregivers consistently at predictable times of the day (See 'Essential resources and settling a cat into rescue care' section for more information).

Placing an enrichment chart designed for that cat somewhere clearly visible to provide a structured day for the cat can really help. In busy centres, it can prevent these sorts of cats from being overlooked and emphasise the importance of these daily care tasks. It is important that toys are rotated to maintain their novelty, particularly for cats that are likely to suffer from frustration.

Another time that frustration may be seen in Cats Protection is in hand reared kittens. See 'Kitten care' for more information.

Depression

Depression can occur in a variety of animals and is not restricted to humans. If cats have been chronically stressed, they are at risk of becoming depressed. In the rescue environment, experiencing change (eg change of environment), the loss of territory and familiar caregivers, the loss of control, an inability to express natural behaviours, being unable to escape stressors such as the presence of other cats, and loss of predictability are all contributing factors that can cause depression in cats. This is more likely to occur when there is a trigger-stacking of stressors over a prolonged period of time. Depression is one of the most detrimental emotional states and is a serious welfare issue. It is especially concerning as it is very subtle and easily overlooked. It is important to note that while aggressive behaviour in cats is more obvious and has negative effects on people, these cats are emotionally in a slightly better place than a depressed cat, as they are trying to take some control over their situation. In contrast, a depressed cat makes no effort to affect their environment and caregivers would often describe a depressed cat as appearing to have 'given up on life'.

Signs to look out for in a depressed cat include changes in behaviour, such as:

- no longer being interested in their environment, eg the cat no longer sits on the shelf in the run looking at the birds outside
- no longer being interested in human interaction, such as stroking, and no longer greets the caregiver
- sitting in a hunched position with drooping head and shoulders, or may sit in a crouched position.
 A depressed cat is highly unlikely to lie on their back in a relaxed posture and sleep with the stomach exposed and their legs in the air
- depressed cats may not look or move their ears to listen to sights and sounds around them, or be very slow to respond
- they are no longer interested in play, either self-directed play or interactive play with a caregiver

- depressed cats appear to sleep for very long periods of the day and compared to their baseline of when they settled into Cats Protection care, it may have increased. However, they may also suffer from disturbed sleep
- cats may decrease the amount they eat or lack their usual enthusiasm to eat, conversely they may over-eat

It can be a difficult task to bring a cat out of a state of depression. Any cat in care suspected of being depressed needs to be seen by the vet to rule out medical reasons and then consult a gualified behaviourist. Ensure that all stress reduction measures are in place (see 'Stress' section for more information). Depressed cats need lots of patience and understanding. Come into their world quietly and try to gently coax them into playing with a fishing rod toy. For some cats, simply getting them to look in the direction of play can be a positive step in the right direction. All observations should be recorded, particularly to monitor whether the cat is improving or getting worse.

For more advice regarding frustrated or depressed cats, please contact the Cats Protection Behaviour team if working with Cats Protection cats. Alternatively, please contact a qualified ABTC registered behaviourist for advice. See <u>www.abtc.org.uk</u> for more information.





House soiling

Behaviours involving the inappropriately placed elimination of urine and faeces are some of the most common behaviour problems in cats, both in the home and rescue environment. The term actually refers to several behavioural problems; inappropriate urination, inappropriate defaecation, middening and spraying, which are collectively known as 'house soiling'. As with any behavioural problem, the first step is to rule out underlying medical causes and the vet may suggest getting a urine sample tested if urine is involved, or taking a faecal sample into the vet practice.

It is important to differentiate between the behaviours as they have distinct motivations, which in turn will affect the approach needed to manage or resolve the problem.

Urine spraying is a normal behaviour and is different from normal toileting. When a cat goes to the toilet, they will generally urinate from a squatting position and usually produce a large puddle of urine in a private or secluded area. In contrast, cats spray a small jet of urine against a vertical surface. They do this in a standing up position often while quivering the tail (held upright) and paddling with the back legs.

Toileting issues

Once the vet has ruled out medical reasons, then there are a number of litter tray factors to look at. Advice varies depending on whether the cat is currently in Cats Protection care or in a home.

• Litter type – cats are likely to favour the litter type used when they were very young kittens. In the absence of knowing which litter type they used when growing up, most cats will prefer a soft, sand-sized type litter, such as an ultra-clumping type litter. This is the type of material that cats have evolved to use out in the wild, which explains why our pet cats are so keen to use children's sand pits! For cats that are defecating next to a litter tray, but urinating in the litter tray, it could be due to the litter type being too hard on their paws.





As cats place more pressure on their back legs and paws when defecating compared to urinating, a soft litter is preferable to them. The litter should be non-scented and with no air fresheners nearby

- Litter depth generally, cats prefer litter to be about 3cm deep
- Litter cleanliness cats have a reputation for being fastidiously clean, some preferring the litter tray to be emptied after it has been used only once. These cats are not being 'precious' they simply expect the same level of cleanliness as humans do with their toilets. It varies between litter type and cat, but as a general rule, empty litter trays twice a day especially when in Cats Protection care. Avoid litter tray liners as these are generally off-putting for the cat
- Litter tray type litter trays should be big enough to allow a cat enough space to turn around and dig. Some problems are caused by providing adult cats with small kitten trays. There are a number of different types of tray available to purchase or trays can be homemade to meet specific

needs. Every cat is different and it's a case of finding the right tray for the cat. Many cats are happy with the standard, open, rectangular litter tray whereas others prefer the privacy of a covered litter tray. If using a covered litter tray, remove the cat flap door as it can put cats off using it due to keeping the smell contained or tapping the cat when it tries to enter or exit the tray. Older cats will benefit from having a tray with a low side for easier access

- **Privacy** try placing an open litter tray in a cardboard box (open at the top) with two holes cut in the sides for entry and exit holes. This will make the cat feel more secure, doesn't trap the smell inside and is easy to see when it needs cleaning out
- Location, location, location place the litter tray in a private, but accessible location. As clean animals, they prefer their litter tray to be away from all their other resources especially food and water. In the home, it is common for owners to place their litter trays close to the cat flap or a glass back door; however, this

can be quite a vulnerable position from the cat's perspective. It could be easily overlooked by a cat from outside and is quite a high traffic area. Instead look for a quiet corner of the house. Litter trays should not be placed in a row as this will be viewed as one litter tray by the cat

- Number of trays as a general rule, provide cats with one litter tray per cat plus one extra for choice to reduce any competition in the home. Some cats prefer to have one tray for urination and a separate tray for defaecation. In contrast, the restricted space in the pen can be difficult to provide much choice. An indoor foster room often has more flexibility. A pragmatic approach to litter trays is needed depending on the space available and the number of cats in the pen, especially with a queen and her litter
- Accessibility ensure that the trays are always available to the cats and easy to access (eg not placed behind a sofa or behind a closed door). Older cats will benefit from having litter trays placed both upstairs and downstairs for easy access



Middening

This is the deliberate placement of faeces in order to act as a territorial marker. It is different to inappropriate defaecation which occurs in private areas. Owners that have cat faeces on their lawn may have cats involved in territorial disputes. The cat in question needs to be identified as it alters the advice given. If it is left by the owner's cat, then ideally the faecal marker needs to be left to maintain the signal, however faeces from neighbouring cats should be removed.

Spraying

All cats can spray, regardless of whether they are male or female, neutered or unneutered. It is a normal behaviour when performed on perimeter of their territory, usually bushes and fences in their home range. Cats will urine spray in order to leave a specific 'scent message' and will usually use this scent in areas of their territory in which they feel threatened. It is thought that the scent deposited acts as a 'reminder' for the cat to be wary and, for this reason, cats are motivated to renew the scent every time the smell begins to fade, in order for it to remain an effective signal.

Often there is a combination of factors that have led to the development of urine spraying. In some cases, the behaviour can start for one reason and develop or change due to other causes. For example, many owners punish their cat for spraying in the house – this tends to make the cat more anxious and more likely to spray.

The most common stress factor in cats is, in fact, other cats! For owned cats, it could be cats in the local neighbourhood, other cats within the household, or both. Cats are extremely good at hiding stress unfortunately so it can be difficult to pick up on. The other problem is that cats very rarely show obvious signs of aggressive behaviour towards other cats.

Ensuring that the pen design and overall centre design does not allow cats to see other cats will reduce stress and, in some cases, spraying behaviour.

Cats can fake or pseudo-spray whereby the cats goes through the same behaviours without releasing a jet of urine. For some cats, it can perform the same marking function for them. Other cats may show pseudo-spraying as a greeting behaviour or if highly aroused.

Aggressive behaviour

Aggressive behaviour can occur in cats for a number of reasons and sometimes it can be a combination of causes. Aggression in cats is generally a last resort as they would prefer to escape, hide or climb to an elevated perch when faced with conflict. Cats showing aggressive behaviour are often misunderstood and unfortunately labelled as 'spiteful' or 'evil'. However, cats do not have these underlying motivations or emotions. They certainly do not have 'aggressive personalities'. Instead the underlying emotional states cats do feel that can cause aggressive behaviour are fear, anxiety, pain and frustration. Aggression towards people is more commonly reported than aggression towards other cats. Aggression towards people may be over-represented as it has a bigger

direct impact on people involved and is more difficult to live with. Despite this many people faced with an aggressive behaving cat report that the cat did it for 'no reason', but there is always an underlying cause.

As with all behavioural problems, if a cat is showing aggressive behaviour, it is important that it is examined by a vet first. There are a number of medical conditions that can cause aggressive behaviour, and the vet will need to rule these out. For example, a cat suffering from pain will have drastically reduced tolerance levels and this is a very common reason for aggressive behaviour. Cats are very good at hiding signs of pain and so it can be significant welfare issue if pain continues undetected. If no medical cause is found, it is worth exploring the underlying behavioural reasons with a qualified behaviourist



Fear-based aggression

Some cats may be fearful of people and anxious about being approached or handled. If other techniques of avoidance have not worked, then cats may resort to using aggressive behaviour as a way of creating distance between them and the person they are afraid of. Cats can learn that aggressive behaviour is an effective way of getting people to let go – and it usually works. As the cat is scared, getting away is very rewarding and means that the cat will learn to show aggression again next time someone approaches (See 'How cats learn' for more information). This type of aggression usually occurs when the cat is approached by someone, but not exclusively.

Some cats are initially so fearful when they first arrive into the rescue environment that they are 'behavioural inhibited' or show a freeze response and withdraw due to stress. As these cats start to adapt, some may start to show aggressive behaviour. This is a result of the slight improvement in the cat's emotional state as they start trying to exert some control over their environment. It can sometimes be mistaken for 'possessiveness' or 'guarding' behaviour, particularly if the cat displays aggressive behaviour near a hiding place. However, rather than removing a cat's hiding place which would be detrimental to their welfare (see 'Flooding and learned helplessness' in the 'Hiding and avoidance' section for more information), the cat should be encouraged to view the hiding place as safe to reduce the cat's perceived need to show aggressive behaviour. Extra hiding places as well as stress reduction measures will help the cat to adapt.

Misdirected play behaviour

Another common reason for cats to show aggression towards people is where they learn as kittens and young cats that this is a good way of interacting with people. In the wild, kittens start to play as a way of practising hunting behaviours. To start with, this is directed to all sorts of objects; but as they develop, their mothers direct their behaviour towards appropriate prey items. In the home environment, people often make the mistake of playing with kittens with their fingers or by moving their feet around under the duvet. This is extremely common. Although this may be fun with a young kitten, they can start to direct predatory style play behaviours towards the owner, which may be painful with an adult cat and owners find it increasingly difficult to live with. Misdirected play behaviour account for a large proportion of behavioural problems.

Often this type of aggression appears as 'ambushing' where the cat lies in wait, ready to attack as soon as someone walks by. From the owner's perspective, the behaviour may seem 'out of the blue' or 'unprovoked', having not noticed the cat in the predatory crouch position. Cats showing this type of behaviour often don't have many other things to do in their environment. They must be provided with lots of appropriate things to attack – there are many suitable toys available. Time should be spent playing with the cat but the games should be distant from the body - for example, using 'fishing rod' type toys. Multiple play sessions throughout the day, allowing the cat to catch and 'kill' the toy can help keep them mentally stimulated.

Whether in the home or Cats Protection care, it is very important that care givers are sufficiently covered with protective clothing and footwear. When 'attacked' by a cat, it is best to remain completely still and not make a noise. This may seem difficult to do, but any movement or yelps will stimulate the cat to bite or scratch more as this is what it would do with a 'natural' prey item. Staying still will make the cat lose interest quickly, at which point it is possible to move away. Redirect the behaviour onto a fishing rod toy away from the body. This approach needs to be followed consistently by everyone in the household, Cats Protection branch or centre.

Maternal aggression

It is natural for queens to be protective over their young. Thankfully most well socialised queens are quite accepting of people approaching them and handling their kittens. However, some can become aggressive while protecting their young due to hormonal changes that occur during pregnancy and birth. This is more likely if queens are poorly socialised and therefore stressed by the presence of people and confinement of the rescue environment.

Due to the high volumes of pregnant queens or queens with kittens in the care of an animal welfare charity, the employees and volunteers are more likely to encounter maternal aggression compared to a member of the public. It is important that all caregivers are made aware of this as a potential health and safety risk if working with pregnant or nursing queens. Stress reduction measures (see 'Stress' for more info) including a pheromone diffuser such as FELIWAY[®] should be put in place to limit stress felt by the gueen as well as providing her with a safe, guiet and private place to give birth.







Redirected aggression

Redirected aggression is where a cat gets highly aroused or agitated, often by the sight of another cat that they cannot reach, and then redirects this frustration towards a generally innocent bystander. It could be directed towards people, other cats, or other pets, and more rarely, towards themselves. A common situation is where a resident cat spots a neighbourhood cat outside through the cat flap and starts to get agitated. Cats can stay highly aroused for several hours and it may not be clear to an owner that their cat's emotional state was caused by the sight of another cat, who may no longer be present. If the owner goes to stroke the cat or, in some cases, simply walk past the cat in this state, they may attack the owner suddenly. This is another situation that owners will describe their cat's behaviour as 'unprovoked'. In Cats Protection care, the sight, sound or scent of other cats, as well as anything that causes anxiety, fear or frustration may cause redirected aggression. The cat's arousal level should be carefully assessed before employing safe handling practices, and steps taken to reduce any stressors.

Aggression towards other cats

Aggression between cats is a very common problem. The impact this has on a cat's emotional state and stress levels is frequently underestimated by caregivers. It is the nature of the cat as a territorial species. Although they can be very sociable in some circumstances, they tend to feel threatened by unfamiliar adult cats. This is why cats that are not familiar with each other should not be housed together in Cats Protection and why it is recommended that pens have solid, opaque (non-see-through) barriers between them.

Aggression between cats within the rescue environment should be avoided at all costs – threats from other cats are very stressful and the confined environment amplifies this. Hence, cats that are housed together from the same household should be separated immediately if there are signs of aggression or tension, such as subtle cat flap blocking, and then monitored postsplit to see how both cats react. Equally, visual contact between neighbouring cats should be blocked where one or other shows signs of aggression, avoidance or stress (see the 'Cats living together' section for more information).

The likelihood that cats will feel threatened by other cats that they do not know is also an important consideration when homing cats. Aggression between cats is the commonest behavioural reason for them to be returned after homing. However, a programme of gradual introduction is very effective at reducing incidents of aggression. This programme of integration is available in the behaviour hub section of the Cats Protection website <u>www.cats.org.uk/</u> <u>cat-care/cat-behaviour-hub</u>

It is helpful to provide people homing a cat who already have one or more cats at home with leaflets to explain a gradual integration programme. It is important to emphasise that they should start off with the cats in separate parts of the house before they take the new cat home (see 'Integration' section for more information).



Hiding and avoidance

Some adult cats may be fearful and difficult to handle when they first come into the rescue environment. This may be for a variety of reasons including poor socialisation, genetics, stress or previous traumatic experiences. They cannot be socialised in the same way as young kittens once they have passed the socialisation period as brain development is complete, but it may be possible to desensitise them (see 'Desensitisation' section) so they are more relaxed and are more likely to be homed successfully (see 'Kitten socialisation' section for more information).

As cats cannot tell us how they feel, it can be difficult to recognise when cats feel stressed or threatened and cats are very good at hiding stress. Sadly, fear and anxiety based hiding behaviours are likely to be under-represented to behaviourists as these behaviours do not have a direct, negative effect on the caregiver compared to aggressive behaviour. This 'suffering in silence' is a welfare concern and caregivers need to be aware and take action to help these cats. Signs of fear include running away and retreating to hiding places. A scared cat will show dilated pupils and/or flattened ears and will cringe and cower from whatever they are fearful of. They may show a reduced use of space, be less likely to perform their normal maintenance behaviours and may just be eating, drinking and toileting at night.

Sometimes an underlying fear can develop into aggressive behaviour – where the cat adopts 'fight' instead of 'flight' as a tactic, instead of a last resort. Usually aggression develops because the cat feels cornered or trapped, or because they have previously learned that flight is unsuccessful. It is important to avoid putting cats into this situation and to ensure they can always get away easily if they want to.

When addressing fearful behaviour in cats, it is important to first make sure that there are no medical reasons that could be causing this behaviour, especially if it is a recent change.

Cats are very subtle in their behaviour when something is wrong and it is very easy to overlook an increase in hiding behaviour. This stems from also being a prey animal as well as a predator so they try to hide signs of vulnerability. Any changes in the cat's behaviour should be discussed with the vet as they will have access to the cat's medical history. If the vet has ruled out medical reasons then there could be a number of behavioural reasons that could cause a change in the cat's behaviour. The best way to identify the underlying cause is to get a referral from the vet to a qualified behaviourist.

Desensitisation

'Desensitisation' is a gradual process of trying to increase the cat's confidence to whatever they find scary or threatening – whether real or perceived by the cat. Cats can be fearful of a variety of things, including sounds such as fireworks or trips to the vets and the associated car travel. This means that they are considered to be 'sensitised' to these things and a carefully planned desensitisation programme helps bring their emotional state back down to a normal level. The following example explains how desensitisation principles can be applied to a particular situation that is frequently seen in Cats Protection.

It is certainly not a quick fix! Programmes need to be tailored to the individual and only progressed at the cat's pace. If at any point a cat shows signs of anxiety or fear, then it is important to go back a step or two. Any environmental stressors need to be taken into account and minimised where possible. Food can be used as an incentive to help change a negative association to a positive association. Ideally desensitisation programmes should be carried out by one caregiver so that the cat learns to trust that individual over time, however it should be noted that this reaction will not generalise to other people. Cats will naturally 'go backwards' and show increased fear responses once adopted in the new home and this is to be expected. Cats should not be held back from rehoming in order to 'make them perfect' as that won't happen in the confined shelter environment. Placing the cat with an understanding owner who can carefully carry out a gradual desensitisation programme at home is the best welfare option for most cats, compared to being in a shelter.

Some cats will improve rapidly and others may take a long time or never be desensitised. Cats must have had at least some socialisation as kittens for desensitisation to be successful. It is not suitable for feral cats, and those who have had little to no socialisation at all and therefore these cats will have to be homed to a farm or stables rather than a domestic home (see 'Feral cats' section for more information).

Desensitisation is often confused with another behavioural term 'habituation'. Habituation is the process where cats learn which parts of their environment are harmless and therefore irrelevant to them. Habituation occurs during the kitten socialisation period for example. When very young kittens learn about different objects in their environment or experiences as having no consequences, they can be ignored meaning the kitten has habituated to it. In contrast, desensitisation is used for cats already showing a fear response.

Example of desensitisation: Cats wary of people

Commonly cats may be wary of people. A structured desensitisation programme to help cats that are unsure of people would start by having very limited and nonthreatening contact with them at a level that they can cope with.

1) For some cats, the starting point might be sitting quietly a few metres away from the cat's pen, avoiding eye contact and not talking to the cat for a few minutes before leaving again.

2) After multiple repetitions and the cat feeling calm in the person's presence, they could try slow blinking at the cat and then turning their head away slowly. Continue to ignore the cat after this while monitoring the cat's reaction out of the corner of their eye to see if the cat slow blinks back.

3) The next stage if the cat is comfortable could be to gently talk to the cat in a soft voice.

4) Depending on the cat, they may respond to a still hand held away from their face so that the cat would have to choose to come forwards for a sniff or alternatively, they may cope better with watching a toy being moved slowly away from the cat.

5) Continue to build up over time depending on the cat's responses. Gradually the amount and duration of contact can be increased over weeks.

Flooding and learned helplessness

Flooding is repeatedly exposing the cat to something at a level that the cat finds terrifying in the hope that they will get used to it. For example, stroking a cat that's trying to hide or get away. This is often combined with not allowing the cat to show their normal coping mechanisms such as hiding. If cats learn that nothing they try to escape from the scary situation works, then they can go into 'learned helplessness'. Learned helplessness is where the cat 'shuts down' and outwardly appears not to react. This is a significant welfare problem. Flooding does not address the underlying causes for the behaviour and the cat is highly likely to become more sensitised towards (more fearful of) whatever they were originally afraid of. The particular difficulty with flooding in cats is that it is hard to read and interpret their behaviour and underlying emotional states at the best of times. Often well-meaning people accidentally flood cats without even realising it. For example, removing the hiding place of a fearful cat in the hope that they will adapt or 'come round' is flooding, especially if combined with forcing contact with the cat. See 'Why confining or attempting to tame feral cats causes poor welfare' under 'Feral cats' for an example.

For branches, centres and vet practices working with Cats Protection cats, please contact the Cats Protection Behaviour team for more advice (see 'References, further reading and Cats Protection resources' section for contact details). Alternatively for cats belonging to members of the public or other organisations, please contact a member of the Animal Behaviour and Training Council www.abtc.org.uk



Scratching

Scratching is a normal behaviour for cats and therefore they need an outlet in order to express this natural behaviour. The main two reasons that a cat will scratch is:

1) For claw maintenance where they remove the outer sheaths of their claws. This tends to be more of a plucking motion with their paws.

2) As a territorial marker – both a visual mark from the long scratch lines left behind and depositing pheromones from the scent glands in between their toes. Cats can also increase their scratch marking in times of stress. For stressed cats, it is important to rule out the underlying cause of the stress. The first port of call is a health check by the vet to rule out any underlying medical problems. A referral to a qualified behaviourist can help to identify the cause of any anxiety.

All cats should be provided with scratching facilities.

Ideally a scratch post should:

- be tall enough (at least 60cm) for the average adult cat to allow them to stretch up on their toes while scratching
- be sturdy enough as cats like to lean their body weight against the post while scratching
- have vertical thread to facilitate a full range of vertical scratching movements

While many cats like to scratch vertically, others prefer to scratch horizontal surfaces such as carpets, mats and stairs. Understandably, these cats are unlikely to be interested in vertical posts and need scratching facilities that replicate what they are currently using – cardboard scratchers can be a good alternative.

Locations for scratch post placement in the home:

• cats like to stretch and scratch when they first wake up so place posts near to where the cat sleeps

- place posts near doors, cat flaps or windows as cats are more likely to perform scratch marking near entry and exit points
- scratch posts can be placed next to furniture, like beds and sofas, as these are commonly used by cats

In Cats Protection, it is important that scratching facilities are either disposable or rehomed with the cat. Scratching posts are difficult to disinfect and may still pose a risk for harbouring infectious disease such as parvovirus or ringworm. Ideas for appropriate scratching facilities include using a carpet tile from a carpet shop or corrugated cardboard from packing companies. These can be fixed to a mesh door with a cable tie to prevent them moving. It may be worth asking owners that are relinquishing their cat to also supply the cat's accessories including a scratch post if they already have one. This provides familiarity and scent continuity as they stay with cat while in care and in the new home. Specific fundraising campaigns or online shopping wish lists could be utilised in order to provide every cat in care with a suitable scratching post.

It is worth noting that cats don't scratch wallpaper or furnishings to be naughty or get revenge on their owners. In fact, textured wallpaper in particular is especially irresistible to cats as it meets their needs. This is why it is important not to tell a cat off for scratching behaviour, however frustrating it may be, as it does not stop the behaviour and will make the cat feel anxious, which could lead to the development of other unwanted behaviours.



In order to stop the unwanted scratching, you need to provide the cat with a suitable alternative that meets their needs. A common pitfall is that some adult cats still have a short kitten scratch post that is now too small for them. In the home environment, place the new post next to the area that the cat is scratching, eg a sofa. To make the sofa seem unappealing, cover the area being scratched with something shiny or sticky that will feel unpleasant under their claws such as black plastic bin liners, a couple of layers of foil or stickyback plastic. Always patch test first to ensure it doesn't cause any damage to your property. Spray six doses of FELIWAY[®] Classic spray to the scratched area of the furniture daily. This can help reduce anxietyrelated scratching by mimicking facial rubbing. Stop when the cat starts facial rubbing the area themselves.

Encourage the cat to use the post by rubbing cat mint leaves on it. Cat mint is the plant that catnip originates from and can be found in most garden centres. Alternatively try using a quality catnip spray or dried catnip. Playing around the post with a fishing rod toy can help encourage a cat to use a scratch post. Avoid the temptation to lift up the cat's legs and scratch the post with their paws as cats will generally find this very off-putting and may avoid the post in future. Cats do not scratch where they facial rub and do not facial rub where they scratch. Therefore, never be tempted to spray FELIWAY® *Classic* on the scratching post as it could prevent the cat using it! As FELIWAY[®] Classic spray encourages facial rubbing and relaxation behaviours and does not encourage scratching, it therefore may prevent the cat from scratching that area.

For cats scratching wallpaper, there are corner posts available that attach onto walls. There are a variety of different posts commercially available for vertical, horizontal or diagonal scratching, or homemade ones could be used.

Despotic cats

'Despotic cats' is a term often used to describe cats which are particularly territorial and confident, and often intimidate or attack other cats in the neighbourhood. Despotic cats often enter houses, eat the resident cat's food, urine spray or attack the resident cat. Not only do the resident cats suffer from injuries on occasion, but the effect on their mental state should not be underestimated. They can be incredibly stealthy and many owners do not realise that another cat is entering their house. Setting up a camera opposite a cat flap can help identify if other cats are gaining access to the house as well as recording the resident cat's behaviour around the cat flap (as they may show signs of anxiety

and vigilance behaviour). Targeted resident cats may show a variety of behavioural problems as a result of the stress or develop stress-related illnesses. It is extremely important that both cats, especially the target, are not punished or told off as this will only make the situation worse and does not address the underlying issues.

Rule out medical reasons

Both cats involved will need to be health checked by a vet and any underlying medical conditions addressed first before considering behavioural interventions. The most common medical reason for aggressive behaviour is pain, but of course there are many reasons that could cause this behaviour. While any cat could show despotic behaviour, entire toms are often reported. It would be worth finding out if the despotic cat is owned and if so, whether the owner would consider neutering the cat if not already. Both male and female cats are more likely to have a smaller home range if neutered. However it is up to the owner whether they choose to neuter their cat or not.

Find out if the despotic cat has an owner

Reasonable efforts should be made to find an owner. This could include taking the despotic cat to a vet practice to scan the cat for a microchip. However, the easiest method is to ask neighbours and those living close by if they know



where the cat lives or put a paper collar on the cat asking the owner to get in touch. If the cat does not appear to have an owner in the immediate locality, it may have strayed from further afield. You could also put up posters advertising the cat as a found cat or check lost and found registers/ websites. It is important to record efforts made to find an owner, just in case they come forward in the future.

If there is no evidence of an owner, then the cat could be neutered and rehomed through an animal welfare charity. For cats coming into Cats Protection, this would occur in accordance with the charity's stray policy. If the despotic cat is feral or poorly socialised, then the cat could be relocated to another suitable outdoor environment.

If the other cat has an owner, the best way to manage this situation is for both owners to have a tactful and collaborative chat to agree a way forwards. Both owners have a responsibility for their own cat and it can be unhelpful to blame the owner of the despotic cat.

Resources and cat flaps

Both the despotic and target cats will need a safe, secure territory with sufficient essential resources (see 'Essential resources and placement' section for more information').

An exclusive entry cat flap, such as a microchip or magnetic cat flap, can help prevent other cats from entering the house. Attention needs to be given to other potential entry and exit points in the house like windows or doors left ajar. Fly screens or products designed for indoor cats could be used on windows and doors in summer. Some cats may even need their cat flap to be blocked by locking it and placing a solid board on both sides of the cat flap to send a clear message to both cats that it is no longer an entry or exit point. In these instances, the resident cat will need the owner to provide access to outside, and target cats will benefit from being escorted outside by their owner for protection. The resident cat may feel safer if the windows are obscured with an opaque or solid covering at cat-height so that they cannot see outside. This could discourage them from spending a high proportion of their time being hypervigilant, looking out for the despotic cat. If both cats have enough resources in their home and garden, they are less likely to wander further afield. Target cats in particular need to be provided with litter trays as they may be too anxious to go outside.

Despotic cats can sometimes be quite engaging and friendly towards people, in contrast to their behaviour towards other cats. It is crucial that everyone in the target cat's household is consistent and that no one is encouraging the despotic cat into the garden or house.

Interactive play and feeding enrichment

Interactive play is a great form of mental stimulation and physical exercise. Both the despotic cat and target cat need to have regular, little and often play sessions throughout the day. The target cat will also find this a good distraction and help to relieve their stress, and interactive play is good for the despotic cat as it can help relieve that pent up energy. Introducing both the cats involved to very basic feeding enrichment is a great way to make meal times more interesting (see 'Feeding enrichment' under 'Essential resources and settling a cat into rescue care' section for more information).

Time sharing

Sometimes owners can work together so that the cats are given outdoor access at different parts of the day to avoid conflict. This relies on good communication by all owners involved. Additionally it can be helpful if the despotic cat wears a quick-release collar with several bells on it to alert their presence to the target cat and their owner. Another option is for one or more of the owners to cat-proof their garden to provide a safe outside space for their cat.

When rehoming a cat, it is important to consider the local cat density for particularly territorial cats, especially if they have experienced known conflict with other cats in the past.



Other problem behaviours

There is a range of other behaviours cats tend to show less frequently than the behaviours previously mentioned in earlier sections. Some may be in response to events in their environment that cause them stress - for example, cats can chew or swallow items that are not food, such as pieces of cloth, or even plastic. This is known as pica. Some cats may develop behaviours such as binge eating and vomiting, or excessively grooming or plucking at their hair. While it is not within the scope of this section to cover all possible behaviours a cat may show, a few examples are discussed below. If cats show any of these behaviours or behave in other ways that are not normal, they must checked by the vet. Many types of behavioural change can be precipitated by medical conditions, so it is important that these possibilities are examined first. When medical causes are ruled out, a qualified behaviourist can give further advice. For Cats Protection people, please contact the Behaviour team.

Overgrooming

Overgrooming refers to excessive levels of grooming which can lead to hair loss and noticeable bald patches. Some cats may even damage their skin. While hair could be missing anywhere on the cat's body, hair loss is frequently seen on the flanks, back, inside of the hind legs, abdomen or groin area. There is a number of possible medical underlying causes, so it should not be assumed that the cat is stressed (although it can play a role) without a thorough health check first and basic tests may be needed. Common causes include, but are not limited to, skin disease, including ringworm and parasites (eg flea allergic dermatitis), allergies (such as food or an environmental allergen), pain including cystitis (inflammation of the bladder), or arthritis.

It is important not to punish a cat when they are overgrooming as this may cause distress and could make it worse.

Observations to discuss with the vet:

- whether the hair is completely missing or shortened
- whether the hairs feel soft to touch or spiky
- whether the cat is excessively grooming, hair pulling, or chewing the hairs or skin

- whether the skin is affected or damaged
- where the hair loss or bald patches are on the cat's body
- any other changes in the cat's behaviour, for example an increase or decrease in drinking or eating

Behaviourally, the most common reasons for overgrooming are in response to an underlying anxiety, stress or conflict.

Basic measures to help cats that are overgrooming in Cats Protection care.

- Keep a diary or record behaviour observations to monitor change over time
- Implement stress reduction measures (see 'Stress')
- Monitor relationships with other cats that share the same accommodation in case they are not in the same social group and need to be split up (see 'Cats living together' section)
- Rehome the cat as quickly as possible once deemed fit to home by a vet. The confined nature of the rescue environment means behaviour modification is limited and does not compare to the complexity and mental stimulation of a home, particularly one with outdoor access

Attention seeking behaviour

Many different types of behaviours can manifest for the underlying motivation of attention seeking. It may or may not be a problem, depending on the underlying cause, behaviours expressed, intensity and whether the owner or Cats Protection employees/ volunteers consider it to be a problem. These include anything from scratching furniture, vocalising and begging type behaviours, weaving between legs, stealing objects or knocking them onto the floor, biting and even spraying. It may be combined with another problem or be the primary problem. Medical reasons need to be ruled out before getting a referral to a gualified behaviourist for advice.

From a behavioural perspective, the behaviours shown often develop as the cat perceives it as a successful way of getting a response from the owner or caregiver and this reinforces the behaviour. It tends to be seen in cats that value social contact with people. An example of this from Cats Protection is where cats miaow and paw at the door of their pen to gain attention from people walking past (which may be employees, volunteers, public or potential adopters). At a low level, attention seeking may actually increase the cat's chances of being rehomed. However, if this is intense or is combined with other behaviours such as pacing or aggressive behaviour, it would be considered a problem. It is very tempting for people to stop, give eye contact and talk or interact with the cat. The cat then gains attention so the behaviour is reinforced and more likely to show this behaviour next time.

An understanding of learning theory, or how cats learn, is therefore necessary to appreciate how these behaviours can develop and what role people play, even inadvertently, in the behavioural problem. There can be different underlying emotions associated with attention seeking and this alters the way the behaviour modification is approached.

Juvenile behaviours

Kneading behaviour, where the cat rhythmically alternates their front paws against a soft surface like a lap or fleecy blanket, is often seen in adult cats as a sign of contentment. Some cats will extend and retract their claws while kneading. This is a retained juvenile behaviour that is originally seen in young kittens to stimulate milk flow in the queen's teat. Some cats appear to 'concentrate' and purr while doing it, and even salivate. This isn't generally a problem behaviour.

Less frequently, adult cats also retain suckling behaviours, sometimes called 'wool sucking' when the cat suckles jumpers or blankets. This may be directed towards themselves, siblings or other cats or dogs in the household, people, or soft items like blankets. Depending on the age of the cat, some older kittens may grow out of it. As with all behaviours, it is not advisable to punish the cat for the suckling behaviour. However, it would be problematic if the cat chews or ingests fabric or fur, or the cat makes the other animal's skin sore and advice should be sought. If it is suspected that the cat has ingested a non-edible item, then immediately contact your vet for advice.

Pica

Pica refers to cats eating non-food items, mostly commonly wool but paper, fabric, leather, plastic, rubber cables or wood have also been reported. As with all behavioural problems, possible underlying medical reasons need to be ruled out first. It is important to observe whether the cat is chewing and ingesting the items and, if the cat is doing so, notify the vet as there is a risk of obstruction. Pica can occur in any cat, however some authors report it may be more common in Siamese and Burmese cats. As yet, a genetic link has not been established. It has not been widely studied as cases are few and far between and therefore there is still much to learn about this behaviour.

Nocturnal activity and excessive vocalisation

Cats are naturally more active during dawn and dusk. Kittens and young cats in particular may be especially playful during these times. While some owners may consider this to be a behavioural problem, it is normal behaviour. Providing kittens and cats with several interactive play sessions throughout the day and into the early evening can potentially reduce the amount of activity shown at night. Avoid a play session immediately before bedtime. There are cat toys on the market designed for self-directed play at night time, such as small, soft balls that are guiet when batted around and also glow in the dark.

Excessive activity at night could be a problem if the cat is restless, pacing and/or excessively vocalising. A variety of medical problems can cause excessive vocalisation including hyperthyroidism (overactive thyroid gland) and cognitive dysfunction (dementia). Behaviourally, the underlying reasons can vary widely and include anything from attention seeking to something either outside or in the house causing the cat to feel fearful or anxious. Some breeds such as Siamese cats are naturally more vocal than others. A thorough history (as for all behavioural problems) is necessary to rule out medical reasons and identify the underlying cause.

Case studies

Every behavioural case will differ, even for the same presenting problem. Cats are all individuals and the contexts and underlying motivations can vary widely. However, there are some general guidelines which can be followed.

The following case studies are designed to reflect some of the decision-making processes involved in resolving behavioural problems with cats from a Cats Protection perspective. It pulls together the knowledge gained from the previous sections within this guide.

Case 1:

A member of the public has notified the local Cats Protection branch that there is a group of five older kittens living in the local neighbourhood and they are concerned that they have been abandoned. The member of the public cannot get close enough to get a good look at them, as they run and hide whenever they are approached. A member of the branch arrives at the location and although the kittens will not come close they appear to be about 14 weeks old. The kittens are caught in a trap and the branch member conducts a hands-off assessment. They are not microchipped or ear tipped and do not appear to be neutered. They are showing signs of fear and display aggressive behaviour towards the branch member. The branch now has the following options.

a) Neuter the kittens and return them to the original location.

b) Bring the kittens in to care, so that they may be health checked, microchipped, vaccinated and neutered and then get them used to the presence of people, with a view to the kittens being rehomed.

c) Leave the kittens as they are.

d) Place the kittens into an emergency kitten crate and move into a pen when space becomes available.

This situation is faced frequently throughout Cats Protection and it is extremely important to choose the most appropriate option for the kittens to ensure we can provide a high level of welfare. However, ensuring good welfare depends heavily on the individual cats involved in these situations.

Answer: a)

As these cats show signs of being extremely fearful of people, it is highly unlikely they have had any interaction with humans during their socialisation period. As they are estimated to be around 14 weeks old, they are now outside of the socialisation period which is between two and seven weeks old.

This means that these kittens are feral and will not be able to be desensitised or become used to being near people, as doing so would cause immense fear and distress. Because of this, the best course of action would be to trap, neuter and return in a timely manner. Option b) and d) would be highly undesirable options to choose for these kittens. Option c) would prevent that stress, although having already trapped the kittens it would benefit the local area to have them neutered in order to help with population control.

While it can be quite emotionally difficult to return kittens as part of a trap, neuter and return to site (TNR) programme, doing otherwise would be extremely detrimental to their welfare. Owing to their past experience during their socialisation period, the way in which these kittens behave in the presence of people is perfectly normal, and they will continue to live a very stimulating life without the need for human companionship.

Which option would best suit the kittens found?

Case 2:

Magic is a six-year-old neutered, female, domestic short hair cat who came into the care of a Cats Protection branch. Unfortunately, Magic was relinquished because she would regularly urinate and defecate around the house and the owners were unable to cope with her toileting issues. Fortunately, however, the branch was able to obtain detailed information about Magic's personality and behaviour on admission, including information regarding her toileting problems and when this had started. The toileting issues began when Magic's owners introduced a new cat to the house, which was also followed by two cats from the neighbourhood entering the house through the cat flap. Magic then developed cystitis and was seen by a vet and treated for the problem. However, as the other cats still had access to the house, the toileting issues did not stop, and Magic was relinquished into the care of a Cats Protection branch.

While in the care of the branch, Magic appeared to be a nervous cat and would continue to urinate around her pen away from the tray and always at night.

Which step should be taken first to help resolve Magic's toileting problem?

- a) Use FELIWAY[®] within Magic's pen.
- b) Add an additional litter tray.
- c) Take Magic to the vet to discuss her toileting issues.

Answer: c)

The next step that should always be taken when investigating a behavioural problem is to take the cat to the vet to rule out any of the many medical problems that could be the cause of the behaviour. In this case, Magic was taken to the vet and she was found to have crystals in her urine causing pain when toileting. Magic was given medication for her cystitis. The other two options are steps that may help and are likely to form part of a behavioural plan. For instance, FELIWAY[®] may help Magic to adapt to the rescue environment and may encourage her to toilet during the day. However, the underlying medical problem would still be present had a vet check not taken place. The initial vet check is a crucial step in ruling out what is causing a behavioural problem.

Cats suffering from cystitis will very often begin to associate the pain of urinating with the litter tray. This causes them to try and find somewhere else to toilet, as the litter tray has become a very negative thing. The cat will need to stop experiencing pain when toileting before an improvement will be seen in their use of the litter tray and therefore the cystitis needs to be treated first.

Cystitis in cats is very often caused or made worse by stress and in Magic's case she was noted to be a timid and stressed cat when in her previous home and in rescue care. To minimise the stress Magic experienced in care, giving Magic a hiding place, keeping consistent routines, gaining trust with the same caregiver, using pheromones such as FELIWAY[®], and providing play and enrichment opportunities once Magic had adapted to being in care were all important steps. Once the cystitis had been treated, some experimentation was needed to discover which type of litter and litter tray Magic preferred. From Magic's history, it was known that other cats were a major stressor for her. Therefore, blocking the sides of her pen to ensure she could not see other cats helped to make a large improvement in her stress levels. Eventually Magic's toileting issues resolved due to the use of both medical and behavioural interventions.

Fortunately, Magic was rehomed to an owner with no other cats, in an area with a low cat density and has been living without toileting problems since.

Case 3:

A pair of siblings named Monty and Mabel came into the care of a Cats Protection adoption centre and they were later homed together. Unfortunately, they returned to the adoption centre eight years later when they were 13 years old, as the owner was unable to cope with them. The owner informed the adoption centre that Monty would occasionally get cystitis and would be treated for it.

In care the cats both seemed very stressed, particularly Monty. In the pen, Monty would not use the cat flap when Mabel was close by, although he would go through when Mabel was away from the flap. Monty would also leave the Cats Protection Hide & Sleep® when Mabel would enter and neither of the cats would allow any physical contact by the team. The cats were not seen to groom or rub each other and would share the inside of the pen but not the hide; however, no signs of aggressive behaviour were seen.

Which of the following steps should be taken to help reduce stress for Monty and Mabel?

a) Interactive play sessions and feeding enrichment.

b) Desensitisation, gradually introducing human contact.

c) Separate the pair in care and home them separately.

Answer: c)

From the behaviours seen while Monty and Mabel shared a pen, it was clear that they were not part of the same social group. The absence of allogrooming, allorubbing, and sleeping while touching demonstrated that. Monty would not use areas of the pen occupied by Mabel such as the Hide & Sleep[®], and he would not use the cat flap when she was close as she was blocking him from doing so. This would indicate that they were not in the same social group as both cats were unhappy at sharing the space, more so for Monty. As cats have evolved from a solitary species, they should not be kept together if they are not considered to be part of the same social group. Other cats are a very common cause of stress and behaviour problems, having a negative impact on their welfare.

The adoption centre split Monty and Mabel up, which had an extremely positive effect on their behaviour. Both cats began to allow team members to interact with them and were seen to show more relaxed body postures. Monty began to use his entire pen. Following the split, team members noticed that Monty would wobble slightly when moving around the pen. Monty was seen by a vet and it was discovered that he had signs of a mild congenital cerebellar disease. Because Monty spent a large amount of time hiding or cowering when he was housed with Mabel, the signs were previously not obvious.

Without separating the pair, Monty could probably have been adopted with the health issue unnoticed. His change in behaviour after being separated showed that he was previously stressed. Having been separated from Mabel, he began to perform normal behaviours without the fear of conflict. It is sometimes difficult to split a pair, particularly with the added pressure from some owners relinquishing their pets. However, it is important to look at each pair objectively, and to understand normal cat behaviour. Ultimately cat welfare is the responsibility of Cats Protection and keeping pairs together which are not in the same social group can often be contrary to their welfare.



Glossary and further information

ABTC – Animal Behaviour and Training Council – the regulatory body for behaviourists and trainers – www.abtc.org.uk

Acquired behaviour – a behaviour that is learned as a result of the cat's experiences, and is not a behaviour that is instinctive or innate or something that they are born with.

Active responder – an animal which is seen to react to its environment while under stress, for example, displaying aggressive behaviour or attempting to escape.

ADCH – Association of Dogs and Cats Homes, which is the umbrella group for dog and cat rescue and rehoming groups across the British Isles and Ireland.

Affiliative behaviour – social interactions that function to reinforce social bonds within a group or which are of mutual benefit to all animals involved in the interaction.

Allogrooming – grooming another individual.

Allorubbing – rubbing on or against another individual.

Animal welfare – describes what an animal experiences and relates to an animal's physical and mental wellbeing.

Animate stimuli – living beings such as people, cats and dogs.

Anthropomorphism – attributing human characteristics, behaviour or emotions to gods, animals or inanimate objects.

Appeasement behaviour – a behaviour with the purpose of reducing conflict used by an individual in an attempt to calm another animal or person.

Behaviour problem – a change in behaviour that can result in negative welfare for the animal, and/or is considered unwanted by the caregiver.

Behavioural inhibition – a cat that withdraws or freezes in response to stress. Signs include a reduction or lack of maintenance behaviours, such as grooming, eating, drinking and toileting.

Blocking – the use of behaviours which restrict another individual's access to a part of the environment or a particular resource.

Bunny kicking – the act of using the front limbs to hold onto an object or prey species, and using the rear limbs in synchrony to repeatedly apply force. The behaviour is performed while the cat is lying on its side, and is usually associated with hunting or play.

Classical conditioning – a type of learning where the cat makes an association between something that predicts something else.

Clips – clips such as pegs or bulldog clips that are applied to the scruff of a cat's neck in an attempt to restrain them. Cats Protection does not condone the use of clips for restraint.

Cognition – the process of gaining knowledge or understanding through experiences, thought or senses, which applies to learning, memory, problem solving and decision making. **Cognitive dysfunction** – deterioration of a cat's mental function or ability due to either physical or psychological factors.

Colonies – a group of cats, generally feral or community cats, formed to utilise resources in an area. They may or may not be the same social group.

Complementary medicine – a form of treatment which is not considered to be mainstream veterinary care.

Crepuscular – animals that are most active at dawn and dusk.

Defaecation – to void the bowels of faeces.

Depression – a negative mental state with a persistent feeling of sadness and lack of interest in performing normal behaviours.

Desensitisation – a very gradual process of getting an animal used to something that they are anxious of at a pace that the animal can cope with.

Despotic cat – an overly territorial cat that often comes into conflict with other cats locally. They seem to actively seek out other cats' territories and break into houses.

Domesticated – domesticated animals are animals that have been selectively bred and genetically adapted over generations to live alongside humans. They are generally genetically distinct from their wild ancestors. This includes companion animals, farm animals and working or draft animals. For example, feral cats and domestic, pet cats are domesticated, while the Scottish wildcat is not. **Ear tipping** – 10mm straightline amputation of the tip of the cat's left ear in adults (slightly less in kittens) carried out under anaesthesia, which is an internationally recognised sign that the cat is neutered and is performed on feral cats.

Endorphins – a type of hormone released by the brain which provides a feeling of pleasure to the individual. This chemical is released in cats during play, or following a successful hunt for example.

Environmental enrichment – aspects of the environment that allow or encourage an animal to perform species specific behaviour.

Ethology – the study of animal behaviour, especially as it occurs in the natural environment.

Feeding enrichment – presenting food in a mentally stimulating way that allows an animal to use natural behaviours to access or consume it.

Feigned sleep – a cat that appears to be sleeping, but is using its other senses, primarily hearing, to remain vigilant and aware of its surroundings. This can often be noticed by the twitching or movement of the cat's ears, as it listens in to its environment. This behaviour occurs in stressful situations, such as being in close proximity to other cats or while in a rescue environment.

Feral cat – a cat that has no positive human interaction during the socialisation period, and is fearful of humans.

FIV – Feline Immunodeficiency Virus. FIV is a virus in cats that is similar to the human virus, HIV or Human Immunodeficiency Virus. However, FIV does not infect humans, and HIV does not infect cats. **Flooding** – repeated exposure to something the cat finds very distressing without opportunity to escape or hide. This severely compromises welfare and must be avoided.

Forage/scatter feeding -

placing food over an area of the environment, requiring the animal to seek out and locate the food.

Frustration – not being able to satisfy a strong desire or not getting what they expected.

Habituation – the process of learning which things in their surroundings are not threatening or harmful and therefore can be ignored. It does not involve the animal showing any signs of fear or distress. This process is involved in kitten socialisation. **Inanimate stimuli** – sights, smells and sounds in the environment or objects that are not alive, such as a vacuum cleaner

Innate behaviour – a genetically hard-wired behaviour which can be performed without any previous experience or learning.

Learned helplessness – the lack of response to something unavoidable and aversive which an animal has learned it cannot escape, and therefore stops attempting to avoid it.

Middening – the deposit of faeces in a visually obvious place with no intention to cover or hide the faeces, differing from defaecation.

Multi-cat household – having more than one cat in the same house.



Novel – an object or situation which is new and is unlike anything previously experienced. This can be different for individual cats, based on their previous experiences.

Opaque – unable to see through.

Operant conditioning – a process in which an animal learns that a particular behaviour will result in a reward or punishment, making the behaviour more or less likely to occur in the future.

Overgrooming – excessive grooming of the coat, usually causing hair loss, baldness or skin damage.

Passive responder – an animal which appears to lose interest with its environment. They may reduce the frequency of maintenance behaviours, appear immobile and perform fewer vocalisations. Passive responders have the illusion of coping better, but in fact tend to be more distressed than active responders, and take longer to settle in the rescue environment.

Pen – while commonly thought of as a writing instrument, in this guide, it is used to refer to the self contained accommodation in which a shelter cat lives while at Cats Protection. A pen generally consists of two parts; an inside section and an outside section, sometimes referred to as a cabin or 'sleep section', and a run, although the design of pens vary.

Pet, domestic or household

cats – socialised cats living with and cared for by humans, typically spending some or all of their time in a human home.

Pharmacology – science that deals with the study of drugs.

Pheromone – a chemical which is produced by an animal which changes the behaviour of other animals of the same species, or the animal itself.

Pica – the consumption or the attempted consumption of items with no nutritional value.

Piloerection – an involuntary response to fear, conflict or arousal in which the fur is raised.

Positive reinforcement -

rewarding an animal for performing a certain behaviour, increasing the likelihood they perform that behaviour again in the future.

Punishment – when an animal receives something that they perceive as very unpleasant or aversive often in response to a particular behaviour.

Qualified behaviourist – a person who possesses the knowledge, practical skills, and education level required by the Animal Behaviour and Training Council (ABTC).

Resources – those items (substances or objects) required for maintenance of life, for example food and water. Resources also include somewhere to sleep/rest, somewhere to toilet and somewhere to exhibit normal behaviour.

Sensitised – a heightened negative state of emotional arousal, such as fear or anxiety, usually in response to either something specific or it may be generalised, for example a cat may be fearful (and therefore 'sensitised') to the specific noise of thunder or it may have generalised to any loud sounds.

Shelter environment – the restrictions, procedures and experiences which are typically found within an animal rescue centre or shelter.



Sneeze barriers – a solid material that reduces the risk of disease transmission, eg through sneezing, between cats housed from separate sources. Generally refers to the walls of a pen.

Social maturity – social maturity occurs between the ages of 18 months and four years and marks a time when cats develop their independence, particularly affecting their interactions with other cats.

Socialisation – socialisation is the process in which cats learn how to interact with people, other cats and dogs. Through this process, cats learn how to interact with those species found within its environment, and any threats they may pose. **Socialisation period** – the early period in an animal's life, occurring at two to seven weeks of age in kittens, in which they learn what is safe, non-threatening and normal.

Solitary blueprint – the behaviours and physical characteristics retained from the ancestors of the domestic cat, which enables cats to thrive in the absence of other cats. This forms the foundation for their behaviour, which affects and influences every aspect of their life.

Spraying – the behaviour whereby a cat backs onto a vertical surface, raises its tail often quivering and squirts a jet of urine onto the surface. This occurs to communicate to themselves and other cats. **Stereotypic behaviour** – a behaviour which is repeated and often used out of the normal context for that behaviour. For example, tigers seen pacing in their enclosure at a zoo are displaying a stereotypic behaviour.

Stray or abandoned cats – cats that are socialised and previously have been pets, cared for by humans (typically in a home) but are now free-living. They have some direct human contact and tolerance and may be fed and provided for to some extent.

Street or community cats – freeliving as single or colony cat(s). Usually they have some direct human contact and tolerance and a limited degree of socialisation. They are usually fed and provided for to some extent.

Stress – the behavioural, physiological and emotional response used to attempt to cope with challenges within the environment.

Stressor – something that causes stress.

Substrate – the material that covers the horizontal surface within an animal's surrounding. Cat litter is often referred to as 'substrate' too.

Territory – an area where a cat eats and sleeps; defined by scentmarking to avoid conflict with other cats.

Time sharing – a process in which two or more cats will share the use of a resource or part of their surroundings at different times to avoid conflict. **TNR** – trap, neuter and return ie a programme where cats are humanely trapped, anaesthetised, neutered (and may undergo other medical procedures at the same time) and are returned to their original site. NB it is not trap, neuter and release.

Urination – depositing liquid waste from the bladder. In cats, they will lower their hindquarters and then release urine in a puddle on the floor, differing from spraying.

Weaning – the process of moving a kitten from a diet of just milk to solid food.

Well-bonded – strong social relationship with a familiar individual. Bonded individuals will display affiliative behaviours towards one another.



Further information

References

Casey, R and Bradshaw, JWS 2008. The effects of additional socialisation for kittens in a rescue centre on their behaviour and suitability as a pet. Applied Animal Behaviour Science, 114: 196-205

Clark, C, Gruffydd-Jones, T & Murray, J 2012. Number of cats and dogs in UK welfare organisations. Veterinary Record, 170: pp 493 – 496

Karsh, EB and Turner, DC 1988. The human-cat relationship. In Turner, DC & Bateson, P (Eds.). The Domestic Cats: the biology of its behaviour, pp. 159-177, Cambridge University Press

Kry, K & Casey, R 2007. The effect of hiding enrichment on stress levels and behaviour of domestic cats (Felis sylvestris catus) in a shelter setting and the implications for adoption potential, Animal Welfare, 16: 375-383

McCune, S 1995. The impact of paternity and early socialisation on the development of cat's behaviour to people and novel objects. Applied Animal Behaviour Science 45: 109-124



Further reading

The Behaviour of the Domestic Cat by John WS Bradshaw, Sarah L Brown and Rachel Casey

Feline Behavioral Health and Welfare by Ilona Rodan and Sarah Heath

The Domestic Cat: The Biology of its Behaviour by Dennis C Turner & Patrick Bateson

ISFM Guide to Feline Stress and Health edited by Sarah Ellis and Andy Sparkes

The BSAVA Manual of Shelter Medicine edited by Rachel Dean, Maggie Roberts and Jenny Stavisky

The Trainable Cat by John Bradshaw and Sarah Ellis

Animal Behavior for Shelter Veterinarians and Staff by Emily Weiss and Heather Mahan-Gibbons

Cat Sense by John Bradshaw

Feline Behavior by Bonnie Beaver

The Welfare of Cats by Irene Rochlitz

Clicker Training for Cats (Karen Pryor Clicker Books) by Karen Pryor

FELIWAY Optimum Platinum Book the new discovery in feline communication: A reference guide by Ceva Animal Health Ltd

Useful websites

www.abtcouncil.org.uk

www.apbc.org.uk

www.asab.org/ccab

www.fabclinicians.org

www.feliway.com/uk

www.icatcare.org

www.gov.uk/government/publications/ code-of-practice-for-the-welfare-of-cats

www.pdsa.org.uk/get-involved/our-current-campaigns/ pdsa-animal-wellbeing-report

Cats Protection resources

For Cats Protection employees and volunteers, the Cats Protection *Cat Care Guide* including information on cat behaviour can be found on CatNav.

The Veterinary Guide

The Welfare Guide

The Feral Guide

Online cat behaviour resources on the Cats Protection website:

www.cats.org.uk/help-and-advice/online-learning

www.cats.org.uk/behaviour

www.cats.org.uk/cat-care/care-leaflets

www.youtube.com/catsprotection

www.facebook.com/catsprotection

www.twitter.com/catsprotection

Free kitten socialisation sounds – www.cats.org.uk/kitten-socialisation

The Kitten Checklist by The Cat Group and supported by many animal welfare organisations to help owners choose a healthy, friendly kitten.

Contact details

The Behaviour team can be contacted at **behaviour@cats.org.uk**

Veterinary trials and research

Cats Protection occasionally becomes involved in veterinary or behavioural research projects, often with university students, lecturers or researchers. Cats Protection's Research team oversees this work and follows strict internal ethical assessments that ensure the emotional or physical welfare of any cats involved is not compromised at all, that the study will be of value and also that the communication of such projects is clear so wider audiences do not misunderstand the charity's involvement. Cats Protection is not involved in any studies involving invasive testing on cats.

Any researchers looking to submit a research request should contact the Cats Protection Veterinary department – <u>veterinary@cats.org.uk</u>

This is the case whether the research request directly involves cats, their day-to-day care or just requesting information or completion of general or specific questionnaires about Cats Protection's cats.

Thank you for taking the time to read through this guide.

03000 12 12 12

veterinary@cats.org.uk www.cats.org.uk/behaviour



THANK YOU

Cats Protection is grateful to our sponsor for their support in the production of this guide.

www.feliway.com/ul

