

# ISFM Guidelines on Population Management and Welfare of Unowned Domestic Cats (*Felis catus*)



**Guidelines rationale:** Cats are among the most commonly kept domestic pets, and coexist with humans in a variety of different circumstances. Cats are sentient beings and, as such, humans have a responsibility for cat welfare where humans and cats coexist. Because cats reproduce efficiently, measures to control populations are frequently needed, but these should be based on ethical and humane approaches.

**Framework:** These consensus guidelines from the International Society of Feline Medicine's Welfare Advisory Panel provide a framework for the approach to welfare and population control measures, primarily among unowned cats and those going through a homing programme.

## Introduction

Domestic cats (*Felis catus*) are among the most common companion animals worldwide.<sup>1–9</sup> They are kept under a wide range of different circumstances, and a substantial number of cats simply live alongside people, with varying degrees of interaction between cats and humans.

Whenever there are interactions between humans and cats, we have a responsibility to try to protect the welfare (wellbeing) of cats as far as is practical. Decisions must take into account the nature of the cat, the nature of human interactions with cats, management of cat populations and appropriate homing or rehoming of cats.

This Guidelines document attempts to:

- ❖ Define the underlying principles that should be considered when trying to promote the welfare of cats (primarily unowned cats), whatever their background.
- ❖ Define assumptions that underpin recommendations and provide guidance on how we can approach population management and human interactions with cats.
- ❖ Establish basic welfare assumptions applicable for those that work with unowned cats in any situation and any country, recognising that each situation is different so the emphasis and outworking of these principles will vary accordingly.

### The nature of domestic cats in reference to their welfare

- ❖ Cats have value as sentient beings and their welfare is important.
- ❖ Cats can experience a range of emotions including pleasant and unpleasant feelings. They can, for example, suffer from pain, fear, anxiety, boredom, frustration, stress, distress, hunger and thirst.
- ❖ Domestic cats (*Felis catus*) originated from a largely solitary, territorial, hunting species (*Felis silvestris lybica*).<sup>10</sup> As a result they are generally not overtly expressive (may hide signs of pain, stress or disease), and often find the presence of other cats in close proximity stressful, although the degree of sociability will vary between individuals and situations.<sup>11–13</sup>
- ❖ Allowing a cat some choice and control over its environment can enhance its quality of life.<sup>14–17</sup>

### The interaction between domestic cats and human beings

- ❖ Any individual domestic cat falls somewhere on a behaviour and lifestyle spectrum from a completely independent-living individual with no direct human contact (and avoiding any such contact),

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The ISFM welcomes endorsement of these guidelines by the American Association of Feline Practitioners (AAFP).



**Basic requirements of any domestic animal**

- ❖ A suitable and sufficient food and water source
- ❖ A suitable environment where the animal can express normal behaviour patterns
- ❖ A suitable environment where the animal is protected from discomfort
- ❖ Protection from fear, distress and other unpleasant emotions
- ❖ Protection from pain, suffering, injury and disease

From Rochlitz<sup>22</sup>

through to a cat kept in a home where it is dependent on human care (see box below).<sup>18-20</sup>

- ❖ Irrespective of where on the behaviour / lifestyle spectrum any cat sits, we have a responsibility to protect the welfare of cats under our care and also to consider how our actions affect all cats.
- ❖ Cats are an important part of humans' lives and the interests of cats, humans and other animals need to be taken into account when making decisions that affect cats, including those made on public health grounds.
- ❖ Human intervention is not always in a cat's best interests.
- ❖ Confining a cat or moving it to a new environment may be highly stressful, and may not be in the cat's best interests.<sup>17,21</sup>
- ❖ Humans can assess the welfare of cats, but this takes skill and knowledge.<sup>17</sup>
- ❖ Welfare involves objective determinations of what is in the best interests of the individual cat and/or cat colony/group, and is not about human gratification or how welfare workers may feel.

**Population management is needed wherever there are excessive numbers of cats, health and welfare issues for cats or people, and/or significant nuisance issues.**



- ❖ There are certain basic requirements that pertain to any domestic animal (see left), and cats are no exception.
- ❖ All advice on welfare and population management should be based on the best currently available evidence, recognising that this may change and improve over time.

**Cat populations**

- ❖ Cat populations often grow because cats reproduce efficiently in many environments.<sup>23</sup> Population management is needed wherever there are (or it is anticipated there will be) excessive numbers of cats, health and welfare issues for cats or people, and/or significant nuisance issues.
- ❖ Wherever cats fall on the behaviour / lifestyle spectrum (ie, whether feral, street, community, stray, abandoned or household cats), population management may be required. Interventions must take into account a cat's position on the spectrum, as well as the local environment, and societal and cultural conditions. As a result, management solutions may need to be adapted to the local situation.
- ❖ Preventing reproduction by ethical surgical (ie, neutering) or non-surgical means has a major role in managing cat populations<sup>23</sup> and in preventing avoidable euthanasia.
- ❖ Euthanasia is a legitimate welfare option for some cats where significant and/or sustained physical or psychological suffering exists or is anticipated (see glossary on

**Aspects of the spectrum of behaviour and lifestyle that characterises *Felis catus***



**Feral cats**  
Free-living as single or colony cat(s). Generally little or no direct human interaction or dependency and often avoidance of direct human contact.

**Street or community cats**  
Free-living as single or colony cat(s). Usually some direct human contact and tolerance. Fed and provided for to some extent.

**Stray or abandoned cats**  
Previously cared for by a human (typically in a home) but now free-living. Some direct human contact and tolerance. Fed and provided for to some extent.

**Household cats**  
Living with and cared for by humans, typically spending some or all of their time in a human home. May be kept as single or multiple cats in the home.

page 816 for definition of euthanasia as used here). In a number of situations, humanely administered euthanasia may be the most appropriate option for an individual cat, although that decision should never be taken lightly and alternative options for healthy cats should always be explored. Failure to administer euthanasia to a cat when needed can be a major welfare issue.

- ❖ Management of cat populations should be planned, targeted and effective; and consider all potential sources of cats. Where euthanasia (or killing for other reasons) is unavoidable, methods used should be as humane as possible. Practices such as using poison or drowning to kill cats are unacceptable.

### Culling of cats is not a solution

Culling cats to completely remove them from a defined area is ineffective in the vast majority of circumstances.<sup>20</sup> This only has the potential to be effective in very exceptional circumstances, in specific isolated environments (eg, small islands), and where there are no sources of new cats. In most situations where culls occur, the void attracts other cats,<sup>20</sup> and potentially those that have previously evaded capture. These cats, and subsequent kittens, may therefore be less tolerant of humans and more problematic to manage.

### Trap, neuter and return of cats

- ❖ Trap, neuter and return (TNR) is a well documented and researched method of population management. When properly conducted, targeting control of a whole colony, TNR programmes have proved to be effective in managing cat populations over many years and in many locations worldwide. A stable group of neutered cats may help limit others from entering the area, and can be managed successfully to avoid reproduction and nuisance behaviour associated with reproduction. Ongoing TNR and population control is needed to maintain stable cat populations.<sup>20,23–31</sup>

- ❖ For optimum welfare, neutered cats and kittens should be returned to the territory where they were trapped. Cats generally thrive, irrespective of whether there is a care-giver providing for some of their needs. If this cannot be achieved (eg, due to legislature or an immediate and real danger), a suitable alternative environment with a sufficient food source may be used (this is referred to as 'trap, neuter and release' or TNRel, rather than TNR). If neither of these is achievable, then euthanasia should be considered rather than confinement (see later).

- ❖ In TNR programmes, a highly visible (from a distance), consistent, recognisable

and permanent sign of neutering is essential, to prevent further intentional trapping or attempts to neuter. This is usually best achieved via the removal of an ear tip (ideally the left ear tip) when the cat is under anaesthesia for neutering.<sup>23,32</sup>

- ❖ TNR programmes need to consider additional health care measures (typically vaccination) for individual cats when TNR is performed. Rabies vaccination is critical where disease is endemic, wherever there is an appreciable risk of infection and/or where legislation dictates.<sup>33,34</sup>

- ❖ Organisations working collaboratively with veterinary facilities are able to minimise any welfare compromise for cats by returning cats rapidly to the location where they were trapped (usually with no more than one overnight stay, generally within the trap basket). This is a well documented and cost-effective procedure.

### Owned cats and population management

- ❖ For owned cats, there is a responsibility for the owner to ensure neutering is undertaken to avoid unwanted kittens and the associated welfare problems. In many countries the proportion of cats neutered is very low, and in all countries there is room for this to be improved.

- ❖ Factors affecting the level of neutering include the willingness to neuter, access to vets who can or will undertake neutering, access to appropriate drugs and equipment, local politics, policies or cultural beliefs, and the affordability of neutering.

- ❖ The timing of neutering is important, to avoid unwanted reproductive activity and the development of undesirable behavioural traits. It is important to routinely neuter both males and females before puberty and there is no benefit in allowing queens to have a heat/season or to have a litter of kittens before neutering. Cats should ideally be neutered before 4 months of age, and there is evidence to show that this can be done safely from as early as 6 weeks of age.<sup>35,36</sup>

- ❖ Microchipping and registering of cats is recommended. It can help both in the identification of cats, and in reuniting lost cats with their owners.



**In many countries the proportion of owned cats that are neutered is very low, and in all countries there is room for this to be improved. Ideally, cats should be neutered before 4 months of age.**

**For some cats, especially previously owned stray and abandoned cats, rehoming with a new owner may provide an ideal welfare solution.**

**For many cats, including most feral and many street and community cats, confinement in a home or rehoming facility is likely to cause unacceptable stress.**

### Homing/rehoming of cats



- ❖ For some cats, especially previously owned stray and abandoned cats, placing them in a new home with a new owner (rehoming) may provide an ideal welfare solution.
- ❖ For many cats, including most feral and many street and community cats, confinement in a home or in a homing/rehoming facility is likely to cause unacceptable stress,<sup>26</sup> and may pose potential health risks to humans (eg, through human-directed aggression). In such cases, alternatives such as TNR, or TNRel if the cats cannot be returned to their environment, should be sought. Euthanasia may have to be considered to avoid long-term confinement if these are not an option.
- ❖ Where rehoming of previously owned stray or abandoned cats is being undertaken, an organised approach is essential. This may include using a network of well maintained interim foster homes with well trained care-givers, and/or a central homing facility, and/or leaving the cat in situ (with support) until a new home can be found.
- ❖ In many homing facilities, the potential number of cats entering greatly outstrips resources, space and the availability of new homes. Therefore, organisations should target resources appropriately to home as many suitable cats as possible with a minimum length of stay and adequate quality of life. Organisations must understand the limits of their resources, and the capacity of any facility should not be exceeded in a manner that is detrimental to the quality of care provided and/or increases risks of disease and stress to cats already in the facility.
- ❖ Where placement of a cat (regardless of its source) with an owner/carer in a human home is being considered, a welfare

assessment is critical. The welfare of the individual cat, the viability of the rehoming programme, and potentially human health too, are compromised if the cat is placed in an inappropriate home.

- ❖ Where cats are (re)homed, organisations thus have a responsibility to match the cat's temperament, behaviour, health and required lifestyle to the anticipated new environment and resources within it, so that welfare needs are met and the new owner is able to care for it. The presence and number of cats already in a potential new home should be considered. Physical checks of new homes are not necessarily required and can waste valuable resources.
- ❖ Homing organisations should provide facilities that minimise stress/distress and maximise the control of infectious diseases. Measures should be in place to ensure that cats do not leave a homing facility appreciably less healthy (physically or psychologically) than when they arrived. This can be achieved through rapid homing, careful design of the facilities, adequate resources and careful management of the cats.
- ❖ Studies have shown that the presence of upper respiratory infections or inappetence/anorexia in cats within a homing facility is frequently a sign of stress, overcrowding and physical discomfort. If a high frequency of upper respiratory infections or inappetence is observed these may be two signs that a careful re-evaluation of the management of the facility should occur.<sup>21</sup>
- ❖ Homing organisations have a responsibility to ensure that all cats and kittens are neutered before they are (re)homed. Pregnancy is not usually a reason to avoid neutering a queen unless doing so would endanger the life of the queen.
- ❖ Homing organisations also have a responsibility to provide cats and kittens with appropriate preventive care (which may include vaccinations, parasite control and microchipping) before they are (re)homed. Priority should be given to control of zoonotic infections, and rabies vaccination is critical where disease is endemic, wherever there is an appreciable risk of infection and/or where legislation dictates.

#### Long-term caging is not acceptable

A stay in a homing facility should be for the shortest possible time, allowing for adequate assessment, treatment, etc. Long-term caging of cats or permanent confinement in a homing/rehoming facility or 'sanctuary' is not acceptable. TNR or TNRel should be considered as alternatives. In some situations, where resources and/or options are limited, euthanasia may have to be considered to avoid long-term confinement.

### Categorisation and outcomes for unowned cats

Practically, to facilitate rational decision-making for individual cats where management measures are required, it is helpful to categorise them and define acceptable welfare outcomes. This is valuable to help target resources appropriately and avoid placing cats in situations or environments that may worsen their quality of life.

This process imposes categories and limitations on what is actually a spectrum of existence. However, while exceptions

may occasionally occur, the categories and outcomes are designed to be pragmatic, widely applicable and objective, to provide a non-emotional framework to work within.

Cats should be categorised according to their original background (if known), their recent/current circumstances and the nature of their interactions with people. How they came to the notice of individuals/organisations working with the cats may also have relevance.

	 Feral cats and kittens	 Street or community cats and kittens	 Stray or abandoned cats and kittens	 Household cats and kittens
<b>Original environment</b>	Free-living Single or colony	Free-living Single or colony	With human in a home Single or multiple	With human in a home Single or multiple
<b>Recent or current environment</b>	Free-living Single or colony	Free-living Single or colony	Free-living Single or colony	With human in a home Single or multiple
<b>Dependency on humans and human care</b>	Little or no direct dependency	Fed/provided for to some extent	Previously cared for by humans	Actively cared for by humans
<b>Nature of human interactions</b>	Direct human contact often avoided	Some direct human contact. Acceptance of human proximity. May allow some handling	Likely to accept human contact and may tolerate handling	Owner with responsibility for cat, so human contact/handling usually accepted
<b>Appropriate outcomes</b>	TNR or TNRel, or occasionally euthanasia <sup>1</sup>	TNR (mostly) or TNRel, or occasionally euthanasia <sup>1</sup> Homing (occasionally)	Rehoming, or TNR or TNRel, or occasionally euthanasia <sup>2</sup>	Rehoming, or occasionally euthanasia <sup>2</sup>

**When might euthanasia need to be considered?**

<sup>1</sup>Where cats are unhealthy. Occasionally euthanasia may need to be considered where cats cannot be returned to their original environment (TNR) or to a suitable alternative environment (TNRel). Every attempt should be made to find a suitable environment, but confinement of a cat not used to humans would cause serious welfare issues and thus euthanasia of healthy cats may need to be considered in some situations – see main text.

<sup>2</sup>On welfare grounds for individual cats where there is unacceptable and/or unavoidable suffering. Every effort should be made to rapidly rehome suitable cats, and euthanasia may have to be considered if long-term confinement is the only other option – see main text.

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### Conflict of interest

The ISFM Welfare Advisory Panel members do not have any potential conflicts of interest to declare.

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## Glossary of terms

This glossary defines the meaning of terms as they are used in the Guidelines document. The terms, with these definitions, may or may not be in wider general use.

<b>Colony (of cats)</b>	Stable, and generally amicable, group of cats living together in the same environment
<b>Companion animal</b>	A domesticated or domestic-bred animal kept primarily for companionship, whose needs can be readily met in the human home, or in close daily relationship with humans
<b>Community cat</b>	Community cats exist as single cats or in colonies. They are cared for within the immediate human community, with one or more humans providing for at least some of their needs. They generally live outside, but may venture into one or more houses or buildings within the community. They are generally accepting of some human contact
<b>Cull</b>	Killing of cats solely for the purpose of preventing them breeding and removing them from the environment
<b>Distress</b>	Very marked and/or severe short- or long-term negative stress
<b>Ethical</b>	Morally acceptable, especially from a welfare perspective
<b>Euthanasia</b>	Killing a cat (without fear, stress or pain as far as possible – see ‘humanely administered euthanasia’) to relieve current emotional or physical suffering, or to prevent emotional or physical suffering where there is an imminent and real threat of this occurring. This might include, for example, killing a feral cat where it has been caught for TNR but cannot be returned to the site of capture or to another suitable site. Long-term confinement of such a cat would almost inevitably cause unacceptable distress and thus euthanasia may be an acceptable welfare option
<b>Felis catus</b>	Domestic cats, previously termed <i>Felis sylvestris catus</i>
<b>Feral cats</b>	Free-living cats (alone or in colonies) with little or no direct dependency on humans, and little or no direct contact with humans. Most feral cats would avoid direct human contact
<b>Foster home</b>	A temporary human home for a cat while a permanent home is being sought
<b>Homing organisation or facility</b>	An organisation and/or facility that undertakes homing and/or rehoming of cats. Sometimes referred to as ‘rescue facilities’ or ‘shelters’
<b>Homing</b>	Where a cat is placed in a home, with an owner who assumes responsibility for the cat. Rehoming (see below) is used when the cat was formerly cared for in this way also
<b>Humane control</b>	Ethically acceptable and compassionate means of controlling cats that inflicts the minimum of stress and suffering on the individual
<b>Humanely administered euthanasia</b>	Methods of euthanasia that minimise any stress, distress, pain or other suffering to the cat in the process. A good example of humanely administered euthanasia is the appropriate use of barbiturate injections
<b>Kitten</b>	A prepubertal cat – one that has not yet reached sexual maturity (which typically occurs at 4–7 months of age)
<b>Neuter/neutering</b>	Prevention of reproduction by the surgical removal of the reproductive organs (ovaries ± uterus for females, testes for males)
<b>Non-surgical reproduction control</b>	Controlling (preventing) the reproductive capacity of a male or female cat through medical means (eg, the use of vaccines or hormonal implants)
<b>Puberty</b>	Sexual maturity – the point at which a cat becomes capable of sexual reproduction (typically around 4–7 months of age)
<b>Rehoming</b>	If a cat is homed (see above) and that cat has previously been in a home with an owner (at some point in its past), then this is referred to as ‘rehoming’
<b>Sanctuary</b>	A facility where cats are kept with a view to permanent care rather than homing or rehoming
<b>Shelter</b>	A facility where cats are kept, mainly for the purposes of homing or rehoming
<b>Stray cat</b>	A cat that was formerly owned as a household pet (spending part or all of its life within a home) but is now free-living outside of the home. Such cats often accept direct human contact and may be partially or fully dependent on a human care-giver
<b>Street cats</b>	Street cats are similar to ‘community cats’ (see above) except that they are not generally specifically cared for by an individual human or group of humans and may thus be less dependent on humans and less accepting of human contact
<b>Stress and negative stress</b>	Stress is a combination of mental, emotional and physical responses to various pleasant or unpleasant stimuli. Short-term stress is a normal response and can be healthy and may result in valuable adaptations. However, if either short- or long-term stress has deleterious effects on the welfare of the cat this would be classified as negative stress. Generally, if a cat is not able to react to remove itself from a cause of stress, this is likely to result in negative stress
<b>Temperament</b>	Underlying character or personality of a cat
<b>TNR or TNRel programme</b>	Trap, neuter and return (TNR) programme, or trap, neuter and release (TNRel) programme

### Terms that have been deliberately avoided

Two terms that have been deliberately avoided in these Guidelines are ‘rescue’ and ‘semi-feral’. ‘Rescue’ is often applied to homing of cats from a variety of backgrounds, including feral, street and stray cats. The term implies such cats are being ‘rescued’ from a dangerous/bad situation and placed in a position of safety. However, homing for many of these cats, as noted in the Guidelines, may actually be harmful to their welfare. ‘Semi-feral’ is imprecise and means different things to different people

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