



WHAT IS A CAT??

ORIGIN + EVOLUTION OF THE DOMESTIC CAT

African Wildcat



Modern domestic cats (*Felis silvestris catus*) are descended from the **African Wildcat** (*Felis silvestris lybica*). The process of domestication started approximately 10,000 years ago in the Middle East when humans began farming the land and storing large amounts of grain. This attracted rodents, providing a predictable food source for the cats. Those cats that were better able to cope living in proximity to humans would have better survival opportunities with such a plentiful food source, and so a natural selection of calmer and tamer individuals would have occurred.

It is also likely that humans started feeding and encouraging the cats as a useful natural vermin control, and may even have begun to capture, adopt and tame kittens.

Unlike dogs which have been selectively bred to hunt, herd or guard, domestic cats still remain very similar to their wild ancestors, both in appearance, and genetically. It wasn't until as late as the 1860s that cat shows became popular and the Victorians started to breed cats for their appearance, favouring the longhaired coat. So, despite some variation in appearance that we see in different breeds today, the domestic cat still has the same natural drives and instincts of its wild ancestors.

As cats continue to become a popular choice for family pets, and their population density increases, it can be difficult to understand their natural instincts and ensure their needs are being met. Sadly, failure to do this can greatly affect a pet cat's quality of life and break the human-animal bond.

CATS ARE

..... HUNTERS

The cat has evolved physically and behaviourally to be a highly specialist hunter and predator – motivated and driven by the sight and sound of prey. To be a successful hunter, the cat's natural rhythms will fit around the times when its main prey of small creatures are active and vulnerable – usually at dusk and dawn (they are "*crepuscular*").



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What this means:

- Cats come armed with sharp teeth and claws.
- Cats are physically active and attracted to movement – their play mimics predatory behaviour.
- They are especially active at dusk and dawn, and during the spring/summer months.
- Cats are likely to bring prey indoors. Hunting behaviour tends to peak when cats are between one and three years old, and after that it may start to decline.
- Cats need to be given the space and opportunity to give their strong natural motivations for these behaviours an outlet.
- Some cats will wander beyond their gardens in search of hunting ground, or may even disappear for long periods during peak hunting seasons.

..... OBLIGATE CARNIVORES

The cat has historically been such a successful hunter that it never needed to revert to vegetable matter to support its diet, thereby evolving as an “**obligate carnivore**” that is unable to survive or thrive without nutritional components found in meat.

What this means:

- Cats **CANNOT** be vegetarians.
- Cats lack some metabolic pathways which process certain drugs. This means that many compounds which are suitable for people or dogs, may be toxic to cats. Many plants not toxic to other species, can be toxic to cats – such lilies. Indoor cats and young kittens may nibble indoor plants and flowers out of curiosity or boredom, or because they have not been given access to suitable plant material to chew, such as grass.



..... HIGHLY TERRITORIAL

A cat's territory is the space it would normally defend and envelopes the resources that the cat needs to survive, thrive and carry out normal behaviour.

What this means:

- Territory is extremely important to cats and they will want to defend it.
- Cats are often more attached to their territory than to their owners.
- They will not necessarily tolerate other cats in the same house or neighbourhood.
- Cats may feel threatened, fight or try to hide because of threats or perceived threats to their territory.
- If a cat's territory is limited, such as when confined indoors, owners must ensure that the environment is interesting and stimulating.
- Cats will rarely voluntarily leave their territory, so when it is necessary – such as cattery stays or even trips to the vets – owners need to be sensitive to their needs and anxieties (*careful choice of catteries and cat-friendly vets is advisable*).
- Cats use a range of methods to mark their territory, such as rubbing, scratching and urine spraying.

..... HIGHLY AGILE

Cats have a unique combination of balance, coordination, flexibility and strength, enabling them to effectively explore a three-dimensional environment, hunt silently and escape danger. Their agile bodies allow cats to maintain their coats in perfect condition, with flexibility to groom themselves frequently and efficiently. Cats are also physiologically adapted for short frequent bursts of activity rather than prolonged periods.

What this means:

- Cats will utilise all dimensions in the house, so opportunities to climb are as equally important to cats as their floor space.
- Cats will often get into unusual and inaccessible places!
- Owners need to provide opportunities for their cats to maintain fitness and suppleness with exercise by incorporating both vertical and horizontal space.
- Cats often have a “mad half hour” of intense activity.



..... SCENT SENSITIVE

Cats are highly sensitive to odours, sounds and vibrations undetectable to humans. Cats use scent deposits and their acute sense of smell as a means of communication with each other and to define their territory – usually to keep cats at a distance (*except for when seeking a mate or scent marking members of their feline group*). They use scent derived from glands on the face and the body, as well as urine and even faeces in different circumstances.

What this means:

- Any changes to the familiar and reassuring scent profile of the cat's home can be challenging, such as household cleaners and deodorisers, new furniture, visitors (*people and animals*), other cats coming in through the cat flap, redecorating etc.
- Cats leave scent messages for self-assurance. When they are relaxed they mark with their facial glands, and if they feel insecure in their homes, they may resort to stronger signals such as urine spraying.

..... SELF-RELIANT

The cat does not need to have others of its own species around – it can hunt for itself, find its own den and defend its own territory. Cats keep themselves clean, their claws sharp, and protect themselves by being highly aware of their surroundings, using their specialist agility, speed and strength to get out of trouble. If the cat feels escape is not an option, it will use its hunting weapons for self-defence. When the cat does have to meet other cats for reproduction, it is fertile and female cats have good mothering instincts.

Unlike dogs (and humans), **cats have no biological requirement for companionship** – they are happy on their own. Cats do not form structured packs like dogs and there is no dominance hierarchy among a group of cats.

What this means:

- Cats may choose not to be dependent and interactive with people.
- Cats may not want a “friend” for company – they are often content to live alone. Sharing territory with another cat can actually be stressful.
- Cats have a strong need to keep themselves clean and ready to hunt so being deprived of the ability to do either is potentially stressful.
- If the territory does not provide what is necessary for the cat, it may move on to another more suitable territory.
- Cats run away and hide if they feel they are in danger.
- Cats are driven to keep their coats in tip-top condition, which can result in grooming off toxic substances that they would normally avoid.
- Cats are “**masters of disguise**” – they are excellent at hiding signs of illness and pain, tending to stay still and quiet to avoid attracting attention. This can make pain and illness difficult to establish and monitor in cats.



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..... HIGHLY AWARE

As a lone hunter, cats have a highly specialised system to allow them to react very quickly and successfully to food opportunities, and to avoid danger. As a small animal without a pack or group to help protect it and alert to dangers, the cat must also be highly reactive (*they are a potential prey species as well as a predator*). Whilst cats may spend up to 2/3 of the day sleeping, when they are awake they are highly alert and aware of their environment, including signs, such as scent, left by their own kind.

What this means:

- Cats can be stressed by sights, sounds and smells in our everyday lives, especially if new or sudden, and often things we are not aware of.
- Cats can react quickly if disturbed or frightened.

..... EMOTIONAL

Cats are not often thought of as an emotional species because they do not have the facial dexterity to convey how they are feeling (*in contrast to humans, apes and dogs*). In order to survive, however, the cat must feel fear, pleasure and frustration, in order to learn about the quality of its environment, and how to behave and integrate what it learns into survival tactics. The cat's natural response to threat is to run away and hide.

What this means:

- Like all mammals, cats are fast learners.
- Emotions and behaviour can change very quickly.
- Having routine and predictability reduces stress and improves the cat's quality of life.
- Changes to a cat's normal behaviour (*such as sleeping more or avoiding contact*) may occur because of emotional change, or may indicate a health problem.



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..... ADAPTABLE

Cats can survive and thrive in a wide range of environmental and social circumstances. They may live in groups (*usually related or have chosen their own companions*) if food and shelter are in abundance (*such as feral or street-cat colonies*). Cats have adapted to cope with the high densities of cats we now have in our homes and gardens, as well as a wide range of “companions” from people and dogs to various other species. They have also adapted to a lifestyle that is not necessarily active at dusk and dawn, but to the activity patterns and availability of food when owners are at home.

What this means:

- Cats can fit into a wide range of lifestyles and often appear to cope very well. They can however, sometimes be pushed too far and problems can occur when they fail to cope any longer. Cats experiencing long-term stress may exhibit a range of behaviours, such as urine spraying or soiling indoors, fearfulness and even aggression – all part of their natural behavioural repertoire, but that do not fit in with our expectations of cats as pets within our homes.