





# *The Cat*



The cat (*Felis catus*) is a domestic species of small carnivorous mammal.[1] [2] It is the only domesticated species in the family Felidae and is commonly referred to as the domestic catorhouse catto distinguish it from the wild members of the family. [4] Cats are commonly kept as house pets but can also be farm cats or feral cats; the feral cat ranges freely and avoids human



contact.[5] Domestic cats are valued by humans for companionship and their ability to kill rodents. About 60 cat breeds are recognized by various cat registries.[6]

The cat is similar in anatomy to the other felid species: it has a strong flexible body, quick reflexes, sharp teeth, and retractable claws adapted to killing small prey like mice and rats. Its night vision and sense of smell are well developed. Cat communication includes vocalizations like meowing, purring, trilling, hissing, growling, and grunting as well as cat-specific body language. Although the cat is a social species, it is a solitary hunter. As a predator, it is crepuscular, i.e. most active at dawn and dusk. It can hear sounds too faint or too high infrequency for human ears, such as those made by mice and other small mammals.[7] It also secretes and perceives pheromones.[8]

Female domestic cats can have kittens from spring to late autumn, with litter sizes often ranging from two to five kittens. [9] Domestic cats are bred and shown at events as registered pedigreed cats, a hobby known as cat fancy. Population control of cats may be achieved by spaying and neutering, but their proliferation and the abandonment of pets has resulted in



large numbers of feral cats worldwide, contributing to the extinction of entire bird, mammal, and reptile species.[10] It was long thought that cat domestication began in ancient Egypt, where cats were venerated from around 3100 BC,[11] [12] but recent advances in archaeology and genetics have shown that their domestication occurred in Western Asia around 7500 BC.[13]

As of 2021, there were an estimated 220 million owned and 480 million stray cats in the world.[14] [15] As of 2017, the domestic cat was the second most popular pet in the United States, with 95.6 million cats owned[16] [17] [18] and around 42 million households owning at least one cat.[19] In the United Kingdom, 26% of adults have a cat, with an estimated population of 10.9 million pet cats as of 2020.[20]

## Etymology and naming

The origin of the English word *cat*, Old English *catt*, is thought to be the Late

Latin word *cattus*, which was first used at the beginning of the 6th century.[21] It was suggested that *cattus* is derived from an Egyptian precursor of Coptic *au*, ‘tomcat’, or its feminine form *suf* – fixed



with -t.[22] The Late Latin word may be derived from another Afro-Asiatic [23] or Nilo-Saharan language. The Nubian word *kaddîska* ‘wildcat’ and *no-biinkadis* are possible sources or cognates.[24] The Nubian word may be a

loan from *Ara*. However, it is “equally likely that the forms might derive from an ancient Germanic word, imported into Latin and thence to Greek and to Syriac and Arabic”.[25] The word may be derived from Germanic and Northern European languages, and ultimately be borrowed from Uralic, cf. Northern Sami *gáđfi*, ‘female stoat’, and Hungarian *hölgy*, ‘lady, female stoat’; from Proto-Uralic *\*käďwä*, ‘female (of a furred animal)’.[26]

The English *puss*, extended as *pussy* and *pussycat*, is attested from the 16th century and may have been introduced from Dutch *poe* – or from Low German *puuskatte*, related to Swedish *katt* *pus*, or Norwegian *pus*, *pusekatt*. Similar forms exist in Lithuanian *puižė* and Irish *púisín* or *púiscín*. The etymology of this word is unknown, but it may have arisen from a sound used to attract a cat.[27] [28]

A male cat is called a *tom* or *tomcat*[29] (or *agib*,[30] if neutered). A female is called a *queen*[31] (or *amolly*,[32] [user-generated source?] if spayed), especially in a cat-breeding context. A

juvenile cat is referred to as a *kitten*. In Early Modern English, the word *kitten* was interchangeable with the now-obsolete word *catling*. A group of cats can be referred to as a *clowder* or *aglar*.

## Taxonomy

The scientific name *Felis catus* was proposed by Carl Linnaeus in 1758 for a domestic cat.[1] [2] *Felis catus domesticus* was proposed by Johann Christian Polycarp Erxleben in 1777.[3] *Felis daemon* proposed by Konstantin Satunin in 1904 was a black cat from the Tr 2017, the IUCN Cat Classification Taskforce followed the recommendation of the ICZN in regarding the domestic cat as a distinct species, *Felis catus*. [41]

## Evolution

Main article: Cat evolution

Skulls of a wildcat (top left), a housecat (top right), and a hybrid between the two. (bottom center) The domestic cat is a member of the Felidae, a family that had a common ancestor about 10–15 million years ago.[42] The genus *Felis* diverged from other Felidae around 6–7 million years ago.[43] Results of phylogenetic research confirm that the wild *Felis* species evolved through sympatric or parapatric specia-

tion, whereas the domestic cat evolved through artificial selection.[44] The domesticated cat and its closest wild ancestor are diploid and both possess 38 chromosomes [45] and roughly 20,000 genes.[46] The leopard cat (*Prionailurus bengalensis*) was tamed independently in China around 5500 BC. This line of partially domesticated cats leaves no trace in the domestic cat populations of today.[47]

## Domestication

See also: Domestication of the cat

A cat eating a fish under a chair, a mural in an Egyptian tomb dating to the 15th century BC The earliest known indication for the taming of an African wildcat (*F. lybica*) was excavated close by a human Neolithic grave in Shillourokambos, southern Cyprus, dating to about 7500–7200 BC. Since there is no evidence of native mammalian fauna on Cyprus, the inhabitants of this Neolithic village most likely brought the cat and other wild mammals to the island from the Middle Eastern mainland.[48]

Scientists therefore assume that African wildcats were attracted to early human settlements in the Fertile Crescent by rodents, in particular the house

mouse (*Mus musculus*), and were tamed by Neolithic farmers. This mutual relationship between early farmers and tamed cats lasted thousands of years. As agricultural practices spread,



so did tame and domesticated cats. [13] [6] Wildcats of Egypt contributed to the maternal gene pool of the domestic cat at a later time.[49] The earliest known evidence for the occurrence of the domestic cat in Greece dates to around 1200 BC. Greek, Phoenician, Carthaginian and Etruscan traders introduced domestic cats to southern Europe.[50] During the Roman Empire they were introduced to Corsica and Sardinia before the beginning of the 1st millennium.[51] By the 5th century BC, they were familiar animals around settlements in Magna Graecia and Etruria.[52] By the end of the Western Roman Empire in the 5th century, the Egyptian domestic cat lineage had arrived in a Baltic Seaport in northern Germany.[49]



During domestication, cats have undergone only minor changes in anatomy and behavior, and they are still capable of surviving in the wild. Several natural behaviors and characteristics of wildcats may have pre-adapted them for domestication as pets. These traits include their small size, social nature, obvious body language, love of play, and high intelligence. Captive Leopardus cats may also display affectionate behavior toward humans but were not domesticated.[53] House cats often mate with feral cats.[54] Hybridisation between domestic and other Felinae species is also possible, producing hybrids such as the Kellas cat in Scotland.[55] [56]

Development of cat breeds started in the mid 19th century.[57] An analysis of the domestic cat genome revealed that the ancestral wildcat genome was significantly altered in the process of domestication, as specific mutations were selected to develop cat breeds.[58] Most breeds are founded on random-bred domestic cats. Genetic diversity of these breeds varies between regions, and is lowest in purebred populations, which show more than 20 deleterious genetic disorders.[59]

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