

= Jungle cat =

The jungle cat ( *Felis chaus* ), also called reed cat or swamp cat , is a medium @-@ sized cat found in China , the Indian subcontinent , the Middle East and central and southeastern Asia . A member of the genus *Felis* , that consists of small cats , the jungle cat was first described by naturalist Johann Anton GÜldenstädt in 1776 ; however , naturalist Johann Christian Daniel von Schreber , who gave the cat its present binomial name , is generally considered to be the binomial authority . 10 subspecies are recognised . The jungle cat is a large , long @-@ legged cat ; it stands nearly 36 centimetres ( 14 in ) at shoulder and weighs 2 ? 16 kilograms ( 4 @.@ 4 ? 35 @.@ 3 lb ) . The coat , sandy , reddish brown or grey , is uniformly coloured and lacks spots ; melanistic and albino individuals are also known . Moults occur biannually .

Typically diurnal , the jungle cat hunts throughout the day . Solitary in nature , jungle cats do not interact appreciably except in the mating season . The only prominent interaction is the mother @-@ kitten bond . Territories are maintained by urine spraying and scent marking . The cat is primarily a carnivore , and prefers small mammals ( gerbils , hares and rodents ) and birds . It hunts by stalking its prey , followed by a sprint or a leap ; the sharp ears help in pinpointing the location of prey . Both sexes become sexually mature by the time they are a year old ; females enter oestrus from January to March . Mating behaviour is similar to that in the domestic cat ; the male pursues the female in oestrus , seizes her by the nape of her neck and mounts her . Gestation lasts nearly two months . Births take place between December and June , though this might vary geographically . Kittens begin to catch their own prey at around six months and leave the mother after eight or nine months .

The jungle cat is a habitat generalist ; it inhabits places with adequate water and dense vegetation , such as swamps , wetlands and riparian areas . Unlike its name , the jungle cat shuns rainforests and woodlands . The jungle cat is classified as Least Concern by the IUCN . Major threats to the survival of the jungle cat include the destruction of wetlands , trapping and poisoning . The status of the cat in the wild needs further study , though numbers are feared to be on the decline .

= = Taxonomy and phylogeny = =

The jungle cat is a member of the genus *Felis* , which consists of small cats , within the family Felidae . Baltic German naturalist Johann Anton GÜldenstädt was the first to identify a jungle cat when he travelled in the southern frontier of the Russian empire during 1768 ? 1775 at the behest of Catherine II of Russia . He described the animal in a 1776 publication by the name " *chaus* " . However , German zoologist Paul Matschie in 1912 and American zoologist Joel Asaph Allen in 1920 challenged the validity of nomenclature of the jungle cat , arguing that the name *Felis auriculis apice nigro barbatus* was improper ( not being a binomen ) and that " *chaus* " was used as a common name rather than as part of the scientific name in the publication . Mammal Species of the World identifies German naturalist Johann Christian Daniel von Schreber as the binomial authority , who formally used the species name *chaus* in his 1777 publication *Die Säugthiere in Abbildungen nach der Natur mit Beschreibungen* .

A 2006 study gave the phylogenetic relationships of the jungle cat as follows :

Depending on the taxonomic treatment around 9 to 10 subspecies are recognised on the basis of distribution and pelage variation . Large scale phylogenetic studies have not been made to establish their status . The most widely recognized subspecies are :

Results of an mtDNA analysis of 55 jungle cats from various biogeographic zones in India indicate a high genetic variation and a relatively low differentiation between populations . It appears that the central Indian *F. c. kutas* population separates the Thar *F. c. prateri* populations from the rest and also the south Indian *F. c. kelaarti* populations from the north Indian *F. c. affinis* ones . The central Indian populations are genetically closer to the southern than to the northern populations .

= = = Taxonomic history = = =

In the 1820s , German explorer Eduard Rüppell collected a female jungle cat near Lake Manzala in the Nile Delta . English naturalist Thomas Hardwicke ' s collection of illustrations of Indian wildlife comprises the first drawing of an Indian jungle cat , named the " allied cat " ( *Felis affinis* ) by British zoologist John Edward Gray in 1830 . Two years later , German naturalist Johann Friedrich von Brandt proposed a new species under the name *Felis rüppellii* , recognising the distinctness of the Egyptian jungle cat . The same year , a stuffed cat was presented at a meeting of the Asiatic Society of Bengal that had been caught in the jungles of Midnapore ( West Bengal , India ) . J. T. Pearson , who donated the specimen , proposed the name *Felis kutas* for the specimen , noting that it differed in colouration from *Felis chaus* . French zoologist Isidore Geoffroy Saint - Hilaire described a jungle cat from the area of Dehra Dun in northern India in 1844 under the name *Felis jacquemontii* in memory of the French explorer Victor Jacquemont .

In 1836 , British naturalist Brian Houghton Hodgson proclaimed the red eared cat commonly found in Nepal to be a lynx and therefore named it *Lynxus erythrotus* ; Ceylonese naturalist Edward Frederick Kelaart described the first jungle cat skin from Sri Lanka in 1852 and stressed upon its close resemblance to Hodgson ' s red cat . William Thomas Blanford pointed out the lynx like appearance of cat skins and skulls from the plains around Yarkant County and Kashgar when he described *Felis shawiana* in 1876 .

Russian naturalist Nikolai Severtzov proposed the generic name *Catolynx* in 1858 followed by the suggestion of *Chaus catolynx* by Austrian zoologist Leopold Fitzinger for the " swamp lynx " in 1869 . In 1898 , the British zoologist William Edward de Winton proposed to subordinate the specimens from the Caucasus , Persia and Turkestan to *Felis chaus typica* , and regrouped the lighter built specimens from the Indian subcontinent to *F. c. affinis* . He renamed the Egyptian jungle cat as *F. c. nilotica* because *Felis rüppellii* was already applied to a different cat . A skin collected near Jericho in 1864 led him to describe a new subspecies , *F. c. furax* , as this skin was smaller than other Egyptian jungle cat skins . A few years later , the German zoologist Alfred Nehring also described a jungle cat skin collected in Palestine , which he named *Lynx chrysomelanotis* .

The British zoologist Reginald Innes Pocock reviewed the nomenclature of felids in 1917 and classified the jungle cat group as part of the genus *Felis* . In the 1930s , Pocock reviewed the jungle cat skins and skulls from British India and adjacent countries . Based mainly on differences in fur length and colour he subordinated the specimens from Turkestan to Balochistan to *Felis chaus chaus* , the Himalayan ones to *F. c. affinis* , the ones from Cutch to Bengal under *F. c. kutas* , and the tawnier ones from Burma under *F. c. fulvidina* . He newly described six larger skins from Sind as *F. c. prateri* , and skins with shorter coats from Sri Lanka and southern India as *F. c. kelaarti* .

## == Description ==

The jungle cat is a large , long legged cat ; it is , in fact , the largest of the extant *Felis* species . The head and body length is typically between 59 and 76 centimetres ( 23 and 30 in ) . This cat stands nearly 36 centimetres ( 14 in ) at shoulder and weighs 2 ? 16 kilograms ( 4 @ 4 ? 35 @ 3 lb ) . A study showed that body size showed a decrease from west ( Israel ) to east ( India ) ; this was attributed to greater competition from small cats in the east ; body size shows a similar decrease from the northern latitudes toward the tropics . Sexually dimorphic , females tend to be smaller and lighter than males . The face is long and narrow , with a white muzzle . The large , pointed ears , 4 @ 5 ? 8 centimetres ( 1 @ 8 ? 3 @ 1 in ) in length and reddish brown on the back , are set close together ; a small tuft of black hairs , nearly 15 millimetres ( 0 @ 59 in ) long , emerges from the tip of both ears . The eyes have yellow irides and elliptical pupils ; white lines can be seen around the eye . Dark lines run from the corner of the eyes down the sides of the nose and a dark patch marks the nose . The skull is fairly broad in the region of the zygomatic arch ; hence the head of this cat appears relatively rounder .

The coat , sandy , reddish brown or grey , is uniformly coloured and lacks spots ; melanistic and albino individuals have been reported from the Indian subcontinent . White cats observed in the coastline tracts of the southern Western Ghats lacked the red eyes typical of true albinos . A 2014 suggested that their colouration could be attributed to inbreeding . Kittens are striped and spotted ,

and adults may retain some of the markings . Dark @-@ tipped hairs cover the body , giving the cat a speckled appearance . The belly is generally lighter than the rest of the body and the throat is pale . The fur is denser on the back compared to the underparts . Two moults can be observed in a year ; the coat is rougher and lighter in summer than in winter . The insides of the forelegs show four to five rings ; faint markings may be seen on the outside . The black @-@ tipped tail , 21 ? 36 centimetres ( 8 @.@ 3 ? 14 @.@ 2 in ) long , is marked by two to three dark rings on the last third of the length . The pawprints measure about 5 by 6 centimetres ( 2 @.@ 0 in × 2 @.@ 4 in ) ; the cat can cover 29 to 32 centimetres ( 11 to 13 in ) in one step . There is a distinct spinal crest . Because of its long legs , short tail and tuft on the ears , the jungle cat resembles a small lynx . The caracal and the African wildcat have a plain coat as the jungle cat 's . The jungle cat is larger and slenderer in comparison to domestic cats .

#### = = Ecology and behaviour = =

Typically diurnal ( active mainly during the day ) , the jungle cat hunts throughout the day ; activity tends to decrease during the hot noon hours . It rests in burrows , grass thickets and scrubs . The cat often sunbathes on winter days . Jungle cats have been estimated to walk 3 ? 6 kilometres ( 1 @.@ 9 ? 3 @.@ 7 mi ) at night , although this likely varies depending on the availability of prey . The behaviour of the jungle cat has not been extensively studied . Solitary in nature , jungle cats do not interact appreciably except in the mating season . The only prominent interaction is the mother @-@ kitten bond . Territories are maintained by urine spraying and scent marking ; some males have been observed rubbing their cheeks on objects to mark them .

Bears , crocodiles , golden jackals , leopards and snakes are the main predators of the jungle cat . The golden jackal , particularly , can be a major competitor to the cat . When it encounters a threat , the jungle cat will vocalise before engaging in attack , producing sounds like small roars ? a behavior uncommon for the other members of Felis . The meow of the jungle cat is also somewhat lower than that of a typical domestic cat . The jungle cat can host parasites such as Haemaphysalis and Heterophyes species .

#### = = Diet and hunting = =

Primarily a carnivore , the jungle cat prefers small mammals ( gerbils , hares and rodents ) and birds ; fishes , frogs , insects and reptiles ( small snakes ) are hunted as well . Its prey typically weigh less than 1 kilogram ( 2 @.@ 2 lb ) , mammals as large as young gazelles may also be hunted . The cat may be omnivorous as it may eat fruits , especially in winter . In a study done in the Sariska Tiger Reserve ( Rajasthan , India ) , rodents were found to comprise as high as 95 % of the diet .

The jungle cat hunts by stalking its prey , followed by a sprint or a leap ; the sharp ears help in pinpointing the location of prey . Different techniques may be used to secure prey . The cat has been observed searching for musk rats in their holes . Like the caracal , the jungle cat can perform one or two high leaps into the air to grab birds ; the jungle cat is an efficient climber as well . The jungle cat has been clocked at 32 km / h ( 20 mph ) . Efficient swimmers , jungle cats can swim up to 1 @.@ 5 kilometres ( 0 @.@ 93 mi ) in water and plunge into water to catch fishes .

#### = = Reproduction = =

Both sexes become sexually mature by the time they are a year old . Females enter oestrus ( typically five days long ) from January to March . In males , spermatogenesis occurs mainly in February and March . In southern Turkmenistan , mating occurs from January to early February . The mating season is marked by noisy fights among males for dominance . Mating behaviour is similar to that in the domestic cat ; the male pursues the female in oestrus , seizes her by the nape of her neck and mounts her . Vocalisations and flehmen are prominent during courtship . After a successful copulation , the female gives out a loud cry and reacts with aversion towards her partner

. The pair then separate .

Gestation lasts nearly two months . Births take place between December and June , though this might vary geographically . Before parturition , the mother prepares a den of grass in an abandoned animal burrow , hollow tree or reed bed . Females can give birth to litters of one to five kittens ; typically two to three kittens are born . Females may raise two litters in a year . Kittens weigh between 43 and 55 grams ( 1 @. @ 5 and 1 @. @ 9 oz ) at birth , tending to be much smaller in the wild than in captivity . Initially blind and helpless , they open their eyes at ten to thirteen days of age and are fully weaned by around three months . Males usually do not participate in the raising of kittens ; however , in captivity , males appear to be very protective of their offspring . Kittens begin to catch their own prey at around six months and leave the mother after eight or nine months . The lifespan of the jungle cat under captivity is 15 to 20 years ; this is possibly higher than that in the wild .

#### = = Distribution and habitat = =

A habitat generalist , the jungle cat inhabits places with adequate water and dense vegetation , such as swamps , wetlands and riparian areas . Reeds and tall grasses being typical of its habitat , it is often known as the " reed cat " or the " swamp cat " . Unlike its name , the jungle cat shuns rainforests and woodlands ; it also keeps away from open areas . In Indochina , the jungle cat occurs mainly in deciduous forests rich in dipterocarp trees . Jungle cats are common in agricultural lands , such as fields of bean and sugarcane , across their range . They have often been sighted near human settlements . They can thrive even in areas of sparse vegetation . The jungle cat does not adapt well to cold climates , and is rare in areas where snowfall is common ; it generally occurs up to an altitude of 1 @, @ 000 metres ( 3 @, @ 300 ft ) , though it may occur at as high as 2 @, @ 400 metres ( 7 @, @ 900 ft ) in the Himalayas .

The jungle cat is largely oriental in its distribution ; it is found in China , the Indian subcontinent , the Middle East and central and southeastern Asia . They are the commonest small cats in India . Believed to be absent from south of the Isthmus of Kra in the Malayan peninsula , the possibility of their occurrence was reported from a highly fragmented forest in the Malaysian state of Selangor in 2010 .

Although never truly domesticated , a small number of jungle cats have been found among the cat mummies of Ancient Egypt ( dating to 3700 BC ) , the vast majority of which are domestic cats , suggesting that they may have been used to help control rodent populations .

#### = = Threats and conservation = =

The jungle cat is classified as " least concern " by the International Union for Conservation of Nature and Natural Resources ( IUCN ) ; it is listed under CITES Appendix II . Hunting is prohibited in Bangladesh , China , India , Israel , Myanmar , Pakistan , Tajikistan , Thailand and Turkey , but does not receive legal protection outside protected areas in Bhutan , Georgia , Laos , Lebanon , Nepal , Sri Lanka and Vietnam . Major threats to the survival of the jungle cat include the destruction of wetlands , trapping and poisoning . According to the IUCN , the conservation status of the jungle cat is unclear and needs further research .

Since the 1960s , populations of the Caucasian jungle cat living along the Caspian Sea and in the Caucasus range states have been rapidly declining . Only small populations persist today . There has been no record in the Astrakhan Nature Reserve in the Volga Delta since the 1980s . Jungle cats are rare in the Middle East . In Jordan , they are highly affected by the expansion of agricultural areas around the river beds of Yarmouk and Jordan rivers , where they are hunted and poisoned by farmers for attacking poultry . They are considered rare and threatened in Afghanistan as well . India exported jungle cat skins in large numbers , till this was banned in 1979 ; some illegal trade , however , continues in the country , as well as in Egypt and Afghanistan .

In the 1970s , southeast Asian jungle cats still used to be the most common wild cats near villages in certain parts of northern Thailand and occurred in many protected areas of the country . However

, since the early 1990s , jungle cats are rarely encountered and have suffered drastic declines due to hunting and habitat destruction . Today , their official status in the country is critically endangered . In Cambodia , Laos and Vietnam , jungle cats have been subject to extensive hunting . Skins are occasionally recorded in border markets , and live individuals , possibly taken from Myanmar or Cambodia , occasionally turn up in the Khao Khieo and Chiang Mai zoos of Thailand .