

= Caracal =

The caracal (*Caracal caracal* ; English pronunciation : / ˈkærˈkæl /) , also known as the Persian lynx , is a medium @-@ sized wild cat that lives in Africa , the Middle East , Persia and the Indian subcontinent . It reaches 40 ? 50 centimetres (16 ? 20 in) at the shoulder , and weighs 8 ? 18 kilograms (18 ? 40 lb) . The coat is uniformly reddish tan or sandy , while the ventral parts are lighter with small reddish markings . The caracal is characterised by a robust build , long legs , a short face , long tufted ears , and long canine teeth . It was first described by German naturalist Johann Christian Daniel von Schreber in 1777 . Eight subspecies are recognised .

Typically nocturnal (active at night) , the caracal is highly secretive and difficult to observe . It is territorial , and lives mainly alone or in pairs . The caracal is a carnivore that typically preys upon small mammals , birds and rodents . It can leap higher than 3 metres (10 ft) and catch birds in mid @-@ air . It stalks its prey until it is within 5 metres (16 ft) of it , after which it runs it down , the prey being killed by a bite to the throat or to the back of the neck . Breeding takes place throughout the year with both sexes becoming sexually mature by the time they are a year old . Gestation lasts between two and three months , resulting in a litter of one to six kittens . Juveniles leave their mothers at nine to ten months , though a few females stay back with their mothers . The average lifespan of the caracal in captivity is nearly 16 years .

The caracal inhabits forests , savannas , marshy lowlands , semi @-@ deserts , deserts , and scrub forests . The caracal is classified as Least Concern by the IUCN . Its survival is threatened by habitat loss due to agricultural expansion and desertification ; caracals are often persecuted for killing small livestock . Caracals have been tamed and used for hunting since the time of the ancient Egyptians until as recently as the 20th century .

= Taxonomy and etymology =

The caracal is placed in the family Felidae and subfamily Felinae . The species was first described by German naturalist Johann Christian Daniel von Schreber as *Felis caracal* in the journal *Die Säugetiere in Abbildungen nach der Natur mit Beschreibungen* in 1776 . In 1843 , British zoologist John Edward Gray placed the animal in the genus *Caracal* . The name " caracal " is composed of two Turkish words : *kara* , meaning black , and *kulak* , meaning ear . The first recorded use of this name dates back to 1760 . Alternative names for the caracal include gazelle cat , red cat , red lynx and rooikat . The caracal is often referred to as the lynx , a physically similar cat .

Earlier , the caracal was classified under the genera *Lynx* or *Felis* . However , a 2006 phylogenetic study showed that the caracal evolved nearly a million years before the lynx appeared . The caracal is most closely related to the African golden cat (*Profelis aurata* , often considered a species of *Caracal*) . These two species , together with the serval (*Leptailurus serval*) , form one of the eight lineages of Felidae . The *Caracal* lineage came into existence 8 @.@ 5 mya , and the ancestor of this lineage arrived in Africa 8 @.@ 5 ? 5 @.@ 6 mya . It diverged from the serval probably within the last five million years , around the boundary between the Pliocene and the Pleistocene .

Eight subspecies are recognised :

A 2006 study gave the phylogenetic relationships of the caracal as follows :

= Characteristics =

The caracal is a slender , moderately sized cat characterised by a robust build , a short face , long canine teeth , tufted ears , and long legs . It reaches nearly 40 ? 50 centimetres (16 ? 20 in) at the shoulder ; the head @-@ and @-@ body length is typically 78 centimetres (31 in) for males and 73 centimetres (29 in) for females . While males weigh 12 ? 18 kilograms (26 ? 40 lb) , females weigh 8 ? 13 kilograms (18 ? 29 lb) . The tan , bushy tail measures 26 ? 34 centimetres (10 ? 13 in) , and extends to the hocks . The caracal is sexually dimorphic ; the females are smaller than the males in most bodily parameters .

The prominent facial features include the 4 @.@ 5 centimetres (1 @.@ 8 in) long black tufts on

the ears , two black stripes from the forehead to the nose , the black outline of the mouth , and the white patches surrounding the eyes and the mouth . The eyes appear to be narrowly open due to the lowered upper eyelid , probably an adaptation to shield the eyes from the sun 's glare . The ear tufts may start drooping as the animal ages . The coat is uniformly reddish tan or sandy , though black caracals are also known . The underbelly and the insides of the legs are lighter , often with small reddish markings . The fur , soft , short and dense , grows coarser in the summer . The ground hairs (the basal layer of hair covering the coat) are denser in winter than in summer . The length of the guard hairs (the hair extending above the ground hairs) can be up to 3 centimetres (1 @. @ 2 in) long in winter , but shorten to 2 centimetres (0 @. @ 8 in) in summer . These features indicate the onset of moulting in the hot season , typically in October and November . The hindlegs are longer than the forelegs , so that the body appears to be sloping downward from the rump .

The caracal is often confused with the lynx , as both cats have tufted ears . However , a notable point of difference between the two is that the lynx is spotted and blotched , while the caracal shows no such markings on the coat . The African golden cat has a similar build as the caracal 's , but is darker and lacks the ear tufts . The sympatric serval can be told apart from the caracal by the former 's lack of ear tufts , white spots behind the ears , spotted coat , longer legs , longer tail and smaller footprints .

The skull of the caracal is high and rounded , featuring large auditory bullae , a well @-@ developed supraoccipital crest normal to the sagittal crest , and a strong lower jaw . The caracal has a total of 30 teeth ; the dental formula is 3 @. @ 1 @. @ 3 @. @ 13 @. @ 1 @. @ 2 @. @ 1 . The deciduous dentition is 3 @. @ 1 @. @ 23 @. @ 1 @. @ 2 . The striking canines are up to 2 centimetres (0 @. @ 8 in) long , heavy and sharp ; these are used to give the killing bite to the prey . The caracal lacks the second upper premolars , and the upper molars are diminutive . The large paws , similar to those of the cheetah , consist of four digits in the hindlegs and five in the forelegs . The first digit of the foreleg remains above the ground and features the dewclaw . The claws , sharp and retractable (able to be drawn in) , are larger but less curved in the hindlegs .

= = Ecology and behaviour = =

The caracal is typically nocturnal (active at night) , though some activity may be observed during the day as well . However , the cat is so secretive and difficult to observe that its activity at daytime might easily go unnoticed . A study in South Africa showed that caracals are most active when air temperature drops below 20 ° C (68 ° F) ; activity typically ceases at higher temperatures . A solitary cat , the caracal mainly occurs alone or in pairs ; the only group seen is of mothers with their offspring . Females in oestrus will temporarily pair with males . A territorial animal , the caracal marks rocks and vegetation in its territory with urine and probably with dung , which is not covered with soil . Claw scratching is prominent , and dung middens are typically not formed . In Israel , males are found to have territories averaging 220 square kilometres (85 sq mi) , while that of females averaged 57 square kilometres (22 sq mi) . The male territories vary from 270 ? 1 @ , @ 116 square kilometres (104 ? 431 sq mi) in Saudi Arabia . In Mountain Zebra National Park (South Africa) , the female territories vary between 4 and 6 @. @ 5 square kilometres (1 @. @ 5 and 2 @. @ 5 sq mi) . These territories overlap extensively . The conspicuous ear tufts and the facial markings often serve as a method of visual communication ; caracals have been observed interacting with each other by moving the head from side to side so that the tufts flicker rapidly . Like other cats , the caracal meows , growls , hisses , spits and purrs .

= = Diet and hunting = =

A carnivore , the caracal typically preys upon small mammals , birds and rodents . Studies in South Africa have reported that it preys on the Cape grysbok , the common duiker , sheep , goats , bush vlei rats , rock hyraxes , hare and birds . A study in western India showed that rodents comprise a significant portion of the diet . They will feed from a variety of sources , but tend to focus on the most abundant one . Grasses and grapes are taken occasionally . Larger antelopes such as young kudu]

] , bushbuck , mountain reedbuck and springbok may also be targeted . Mammals generally comprise at least 80 percent of the diet . Lizards , snakes and insects are infrequently eaten . They are notorious for attacking livestock , but rarely attack human beings .

Its speed and agility make it an efficient hunter , able to take down prey two to three times its size . The powerful hind legs allow it to leap more than 3 metres (10 ft) in the air to catch birds on the wing . It can even twist and change its direction mid @-@ air . It is an adroit climber . It stalks its prey until it is within 5 metres (16 ft) , following which it can launch into a sprint . While large prey such as antelopes are killed by a throat bite , smaller prey are suffocated by a bite on the back of the neck . Kills are consumed immediately , and less commonly dragged to cover . It will return to large kills if undisturbed . It has been observed to begin feeding on antelope kills at the hind parts . It may scavenge at times , though this has not been frequently observed . It often has to compete with foxes , wolves , leopards and hyaena for prey .

= = = Reproduction = = =

Both sexes become sexually mature by the time they are a year old ; production of gametes begins even earlier at seven to ten months . However , successful mating takes place only at 12 to 15 months . Breeding takes place throughout the year . Oestrus , one to three days long , recurs every two weeks unless the female is pregnant . Females in oestrus show a spike in urine @-@ marking , and form temporary pairs with males . Mating has not been extensively studied ; limited number of observations suggest that copulation , that lasts nearly four minutes on an average , begins with the male smelling the areas urine @-@ marked by the female , who rolls on the ground . Following this he approaches and mounts the female . The pair separate after copulation .

Gestation lasts nearly two to three months , following which a litter consisting of one to six kittens is born . Births generally peak from October to February . Births take place in dense vegetation or deserted burrows of aardvark and porcupines . Kittens are born with their eyes and ears shut and the claws non @-@ retractable (unable to be drawn inside) ; the coat resembles that of adults , but the abdomen is spotted . Eyes open by ten days , but it takes longer for the vision to become normal . The ears become erect and the claws become retractable by the third or the fourth week . Around the same time the kittens start roaming their birthplace , and start playing among themselves by the fifth or the sixth week . They begin taking solid food around the same time ; they have to wait for nearly three months before they make their first kill . As the kittens start moving about by themselves , the mother starts shifting them everyday . All the milk teeth appear in 50 days , and permanent dentition is completed in 10 months . Juveniles begin dispersing at nine to ten months , though a few females stay back with their mothers . The average lifespan of the caracal in captivity is nearly 16 years .

= = Distribution and habitat = =

The caracal inhabits forests , savannas , marshy lowlands , semi @-@ deserts and scrub forests . Dry areas with low rainfall and availability of cover are preferred . In montane habitats such as the Ethiopian Highlands , they occur at altitudes as high as 3 @, @ 000 metres (9 @, @ 800 ft) above the sea level . The caracal is widespread across the African continent , the Middle East and the Indian subcontinent . Although the Sahara Desert and the equatorial forests do not figure in its distribution , the caracal occurs in the Saharan ranges of Atlas , Hoggar and Tassili to the northwest and the Aïr to the west . The range has diminished considerably in northern and western Africa .

= = Threats and conservation = =

The caracal is categorised as Least Concern by the International Union for Conservation of Nature and Natural Resources (IUCN) ; African populations are listed under CITES Appendix II while Asian populations come under CITES Appendix I. In central , west , north and northeast Africa and Asia , the major threat to the survival of the caracal is habitat loss due to agricultural expansion and

desertification . Caracal are often persecuted for killing small livestock . A 1989 survey revealed that the caracal was responsible for the elimination of nearly 5 @. @ 3 livestock per 100 square kilometres (39 sq mi) per year in the erstwhile Cape Province , South Africa . During 1931 ? 52 , the number of caracals killed averaged 2 @, @ 219 per year in the Karoo . Some tribes kill it for its meat . As of 1996 , hunting of caracals is prohibited in Afghanistan , Algeria , Egypt , India , Iran , Israel , Jordan , Kazakhstan , Lebanon , Morocco , Pakistan , Syria , Tajikistan , Tunisia , Turkey , Turkmenistan , and Uzbekistan . However , Namibia and South Africa recognise it as a " problem animal " (vermin) and allow its hunting to protect livestock . Caracals occur in a number of protected areas across their range .

= = Interaction with human beings = =

Caracals appear to have been religiously significant to the ancient Egyptians . Caracals occur in paintings and as bronze figurines ; their sculptures were believed to guard the tombs of pharaohs . Embalmed caracals have also been discovered . The ear tufts have been elaborately depicted in some tombs , and referred to as umm risha 't (" mother of feathers ") .

Chinese emperors would use caracals , as well as cheetah , as gifts . In the 13th and the 14th centuries , the Yuan rulers bought numerous caracals , cheetah and tigers from the western parts of the empire and Muslim merchants in return for gold , silver , cash and silk . According to the Ming Shilu , the subsequent Ming dynasty (14th to 17th centuries) continued this practice . Until as recently as the 20th century , the caracal was used in hunts by Indian rulers to hunt small game , while the cheetah was used for larger game . In those times , caracals would be exposed to a flock of pigeons and people would bet on which caracal would kill the largest number of pigeons . This probably gave rise to the expression " to put the cat among the pigeons " .

In the present day , caracals may be kept as pets . They can adapt well to domestic surroundings and are not generally aggressive toward domestic cats and dogs . However , they are typically declawed as their scratches might be dangerous . Caracals should be kept away from pet birds , as they may prey on them . The coat of the caracal is used in making fur coats , while its skin does not have much economic significance .