Cheetah (Acinonyx jubatus)

French: Guépard
Spanish: Chita, Guepardo

Kingdom Animalia
Phylum Chordata
Class Mammalia
Order Carnivora
Family Felidae
Genus Acinonyx (1)
Size
- Head-body length: 112 - 135 cm (2)
- Tail length: 66 - 84 cm (2)
- Male weight: 43 kg (3)
- Female weight: 38 kg (3)

Top facts
- The cheetah is the fastest land mammal on the planet, reaching speeds of up to 87 kilometres per hour.
- Cheetahs mainly hunt during the day to avoid competition with larger predators such as lions and hyenas, which usually hunt at night.
- Unlike other cats, the cheetah has claws that are not fully retractable, enabling it to grip the ground when in a hunting sprint.
- The common name ‘cheetah’ is derived from the Hindi word chita meaning ‘spotted’ or ‘sprinkled’, describing the species’ striking coat.

STATUS
The cheetah is classified as Vulnerable (VU) on the IUCN Red List (1), and is listed on Appendix I of CITES (4).

Two subspecies of cheetah, the Northwest African cheetah (Acinonyx jubatus hecki) and the Asiatic cheetah (Acinonyx jubatus venaticus), are classified as Critically Endangered (CR) on the IUCN Red List (1).

DESCRIPTION
The fastest land mammal in the world (5), the cheetah (Acinonyx jubatus) has many adaptations that allow it to sprint across the plains. Its rangy frame supports long limbs and a deep chest cavity, and this species has a small waist and an extremely flexible spine (3). Unlike other cats, the cheetah has claws that are not fully retractable (3) (5), enabling it to grip the ground when in a hunting sprint (3) (6) (7). The large nostrils allow greater amounts of air to enter the lungs, and the tail is particularly long to provide extra balance when cornering (3).

The common name of this species is derived from the Hindi word chita meaning ‘spotted’ or ‘sprinkled’ (1) (8). The coat of the cheetah is a yellowish, tan or tawny colour with black spots on the upperparts (8) (9) (10), and a paler, whitish colour on the underparts (3) (10). The last third of the tail has a series of...
black rings (10). The small head has high-set eyes and small, flattened ears (2), and is instantly recognisable by the black ‘tear lines’ running from the corners of the eyes to the muzzle (3). Cheetah cubs have a mane of tufty pale hair which sticks upright on the back of their neck (2) (8).

Genetic colour morphs with large, blotchy markings that can merge into stripes occasionally appear in the population. These morphs are known as ‘king’ cheetahs, and were once considered to be a distinct species (3).

**RANGE**

The cheetah has a wide distribution throughout much of sub-Saharan Africa. There are currently four African subspecies recognised: *Acinonyx jubatus hecki*, *Acinonyx jubatus jubatus*, *Acinonyx jubatus fearsoni* and *Acinonyx jubatus soemmeringii*. All of these subspecies differ in their location across the sub-continent (1).

The Critically Endangered Asiatic cheetah (*Acinonyx jubatus venaticus*), which once inhabited India and south-western Asia, now survives only in Iran, where there are believed to be fewer than 60 individuals remaining (11).

**HABITAT**

The cheetah inhabits open, grassy savanna plains and dry bush, scrub and open forests (3) (8). This species can also be found in semi-desert areas (8).

**BIOLOGY**

With the exception of the lion (*Panthera leo*), the cheetah is thought to be the most sociable of the big cats (3). Siblings stay together for around six months after leaving the mother (3) (8), and brothers will often remain together for life (2) (8). In the Serengeti, where the majority of research on the cheetah has been undertaken, male coalitions are common and around a third of the time these involve unrelated males. It is thought that the male cheetah benefits from living in groups by being able to obtain and keep territories, which in turn allows it greater access to females. Apart from when they have young, females are solitary and non-territorial, occupying vast home ranges as large as 800 square kilometres (2).

Female cheetahs become sexually mature at around two years old (3), and can give birth at any time of year (3) (8). At three or four cubs, the average litter size of the cheetah is larger than that of other big cats (3) (8), and litters of up to eight cubs have been recorded (8). After a gestation period of between 90 and 95 days, the blind, helpless cubs are born (6) (8), and are nursed in a lair hidden in a rocky outcrop or within tall grasses (2). Until the cubs are around eight weeks old, the female must leave them alone while she hunts (2), although the female tends to move the young to a new den every few days to avoid predation (6) (8). The death rate of young cheetahs is high, mainly due to the high risk of predation by lions, hyaenas and even baboons (3).

The cheetah is a formidable, agile predator, and it uses its incredible speed to out-run its prey (6). Medium-sized antelopes such as Thomson’s gazelle (*Gazella thomsoni*) make up the majority of the cheetah’s diet on the plains (3) (8), but males hunting together in a coalition often select larger species such as wildebeest (8). Hunting mainly during the day to avoid competition with larger predators such as lions and hyaenas (8), the cheetah creeps as close as possible to its chosen prey before bursting into a chase at full speed (6). The cheetah is able to maintain a speed of up to 87 kilometres an hour for 200 to 300 metres (3), before tripping up its prey or knocking it down with a front paw (6) (8). After bringing its prey to the ground, the cheetah lunges for its victim’s throat (3), killing it quickly through strangulation (6) (8). The carcass is devoured rapidly, as the cheetah is often displaced from its kill by the more aggressive carnivores of the plains, such as the lion (3) (8).

**THREATS**

The cheetah is under threat throughout its range as a result of the loss of its habitat and prey, as well as due to direct persecution (1) (2). Both captive and wild cheetahs have very low genetic variation and it has been suggested that this could pose a severe threat to their survival. The rate of successful births in captive cheetahs is very low, and lack of genetic variation renders wild populations particularly vulnerable to sudden environmental change and disease. However, studies have revealed that wild cheetah populations have a healthy reproductive rate and the implications of genetic similarities remain unclear (3).

One of today’s major concerns is competition with the more successful carnivores of the African plains; lions and hyaenas kill cheetah cubs and also drive adults away from kills (3) (8). In protected reserves where these other animals are thriving, cheetahs may be under severe threat (3) (8). Persecution by farmers because of livestock predation is an additional threat to the survival of this species (1) (3).

The impact of tourism on the cheetah is also a concern, as tourist vehicles could potentially drive the animals away from their kills, or cause females and cubs to become separated. As in other species, the spread of disease is a further threat to the cheetah (1).

**CONSERVATION**

The cheetah is listed on Appendix I of the Convention on International Trade in Endangered Species (CITES), meaning that trade in this species is only permitted under exceptional circumstances (4).

The cheetah is protected by law throughout most of its range and occurs within a number of reserves (1), although competition with lions and hyaenas means that these reserves may not be an entirely efficient conservation strategy for the cheetah (3). Furthermore, the majority of cheetahs are found outside of protected areas (1). In Namibia, South Africa and Zimbabwe, limited trophy hunting of cheetahs is allowed on private property, as a method of encouraging landowners to accept cheetahs on their land by enjoying the profit hunting provides (3).

In Namibia, 95 percent of cheetahs are found on commercial and communal livestock farmland because of the pressures placed on them by predators in reserves. As a result, the Cheetah Conservation Fund has initiated a novel conservation programme, whereby it provides farmers with guard dogs to protect
their livestock herds. To date, this scheme has led to a dramatic reduction in the number of cheetahs trapped and killed (6).

The cheetah is tolerant to a wide range of environmental conditions, and translocation and reintroduction projects within southern Africa have proven to be successful (8).

FIND OUT MORE

Learn more about the cheetah:

- IUCN/SSC Cat Specialist Group: http://www.catsg.org/
- BBC Wildlife Finder - Cheetah: http://www.bbc.co.uk/nature/species/Cheetah

Find out more about cheetah conservation:

- Cheetah Conservation Fund: http://www.cheetah.org/
- Smithsonian Conservation Biology Institute - Cheetah conservation: http://nationalzoo.si.edu/SCBI/endangeredspecies/cheetah/default.cfm

AUTHENTICATION

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http://www.catsg.org/sp-accts.htm

GLOSSARY

- Carnivore: an organism that feeds on flesh. The term can also be used to refer to a mammal in the order Carnivora.
- Genetic diversity (genetic variation): the variety of genes within a particular species, population or breed causing differences in morphology, physiology and behaviour.
- Gestation: the state of being pregnant; the period from conception to birth.
- Home range: the area occupied by an animal during routine activities, which is not actively defended.
- Morph: one of two or more distinct types of a given species, often distinct colour forms, which occur in the same population at the same time (that is, are not geographical or seasonal variations).
- Subspecies: a population usually restricted to a geographical area that differs from other populations of the same species, but not to the extent of being classified as a separate species.
- Territorial: describes an animal, a pair of animals or a group that occupies and defends an area.
- Territory: an area occupied and defended by an animal, a pair of animals or a group.
- Translocation: when individual living organisms from one area are transferred and released or planted in another area.

REFERENCES

1. IUCN Red List (February, 2013) http://www.iucnredlist.org/