








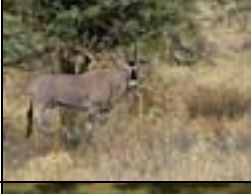






Animals of Africa



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African Cape Buffalo, Savannah Buffalo

The African Cape Buffalo or Savannah Buffalo, which is often confused with the Asian water buffalo, shares many of the same characteristics but is considered a separate species. It is a mammal, in the family Bovidae.

Physical Characteristics

The African Cape Buffalo is a large, dark brown to black hoofed mammal, with drooping fringed ears and large curved horns. It stands 3.3 – 5.6 ft. tall at shoulder and 7 – 11 ft. long. The male buffalos weigh 935 – 2000 lbs, and the females are somewhat smaller. It has a life span of 15 to 25 years.



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Habitat

The buffalo is found in eastern and southern Africa; a smaller subspecies, the forest buffalo is found in central Africa. It may be found primarily in open savannahs and grasslands near a permanent source of water. They are always within a day's walk of a water source. This is especially true in the dry season when they are eating dried grasses.

Behavior

Cape buffalo are extremely social and live in large, mixed herds of up to 2000 members! Both sexes have a separate hierarchy, with males dominant over females. Members of the same subgroup will stay in direct contact with each other and will often sleep with their heads resting on one another.

Cape buffalo have the reputation of being dangerous when they are cornered or injured. There are many tales told by big game hunters earlier this century of injured buffalo turning back and goring or killing the shooter.

Cape buffalo, by living in large herds and eating tall coarse grasses, play a vital role in the ecology of the grasslands. Many of the smaller grazers are unable to digest the tall grasses, and the tall grasses may prevent them from getting to the shorter, more palatable grasses in the absence of buffalo.

Competition for food sources by non-native species such as goats and cattle have challenged the native African grazers. However, the introduction of foreign diseases from non-native species remains the biggest threat. Currently the national parks of Africa are taking great steps to protect their native wildlife against Bovine Tuberculosis. While this does not have a serious effect on domestic cattle it can decimate the herds of cape buffalo and their prey species such as lion and hyena.

Diet

The African cape buffalo is a herbivore that eats tall, coarse grasses.

Reproduction

The cape buffalo reaches sexual maturity between 3.5 and 5 years of age. The gestation period is 11.5 mos.

Predators

Lions and hyenas are the major predators of the cape buffalo.

Interesting Facts

The horns of the cape buffalo are an excellent indication of age and gender. The females and young males do not have the hard shielding that protects the base of the skull in large adult males.

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Baboon

The baboon, of all the primates in East Africa, most frequently interacts with people. Apart from humans, baboons are the most adaptable of the ground-dwelling primates and live in a wide variety of habitats. Intelligent and crafty, they can be agricultural pests, so they are treated as vermin rather than wildlife.

Physical Characteristics

The two most common baboons occur in East Africa, the olive baboon and the yellow baboon. The larger and darker olive baboon is found in Uganda, west and central Kenya and northern Tanzania. Smaller, more slender and lighter in color, the yellow baboon inhabits southern and coastal Kenya and Tanzania. Both types are "dogfaced," but the yellow's nose turns up more than the olive's.

Habitat

Baboons are found in surprisingly varied habitats and are extremely adaptable. The major requirements for any habitat seems to be water sources and safe sleeping places in either tall trees or on cliff faces. When water is readily available, baboons drink every day or two, but they can survive for long periods by licking the night dew from their fur.



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Behavior

Baboons usually leave their sleeping places around 7 or 8 a.m. After coming down from the cliffs or trees, adults sit in small groups grooming each other while the juveniles play. They then form a cohesive unit that moves off in a column of two or three, walking until they begin feeding. Fanning out, they feed as they move along, often traveling five or six miles a day. They forage for about three hours in the morning, rest during the heat of the day and then forage again in the afternoon before returning to their sleeping places by about 6 p.m. Before retiring, they spend more time in mutual grooming, a key way of forming bonds among individuals as well as keeping the baboons clean and free of external parasites.

Baboons sleep, travel, feed and socialize together in groups of about 50 individuals, consisting of seven to eight males and approximately twice as many females plus their young. These family units of females, juveniles and infants form the stable core of a troop, with a ranking system that elevates certain females as leaders. A troop's home range is well-defined but does not appear to have territorial borders. It often overlaps with the range of other baboons, but the troops seem to avoid meeting one another.

When they begin to mature, males leave their natal troops and move in and out of other troops. Frequent fights break out to determine dominance over access to females or meat. The ranking of these males constantly changes during this period.

Males are accepted into new troops slowly, usually by developing "friendships" with different females around the edge of a troop. They often help to defend a female and her offspring.

Diet

Baboons are opportunistic omnivores and selective feeders that carefully choose their food. Grass makes up a large part of their diet, along with berries, seeds, pods, blossoms, leaves, roots, bark and sap from a variety of plants. Baboons also eat insects and small quantities of meat, such as fish, shellfish, hares, birds, vervet monkeys and young, small antelopes.

Reproduction

For the first month, an infant baboon stays in very close contact with its mother. The mother carries the infant next to her stomach as she travels, holding it with one hand. By the time the young baboon is 5 to 6 weeks old it can ride on her back, hanging on by all four limbs; in a few months it rides jockey style, sitting upright. Between 4 and 6 months the young baboon begins to spend most of its time with other juveniles.

Predators

The baboon's major predators are humans. Knowing that humans can easily kill or injure them when they are in trees, baboons usually escape through undergrowth. Males may confront other predators like leopards or cheetahs by forming a line and strutting in a threatening manner while baring their large canines and screaming. Baboons are fierce fighters, but a demonstration such as this can put the predator on the run.

Interesting Facts

- Nearly one-half the size of adult males, females lack the male's ruff (long hairs around the neck), but otherwise they are similar in appearance.
- Baboons use over 30 vocalizations ranging from grunts to barks to screams. Non-vocal gestures include yawns, lip smacking and shoulder shrugging.

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Cheetah

Cheetahs are renowned as the world's fastest land animal. They have been known to sprint at over 60 miles per hour for 10 – 20 seconds, before it begins to overheat. If a cheetah is hunting, and the prey is able to elude the cheetah for over 20 seconds, the prey will likely escape. The cheetah eats medium-sized animals such as gazelles and antelopes, as well as smaller animals such as hares. It is more sociable than any of the other large cats except the lions. Siblings leave their mother at 13 – 20 months, but may stay together for several more months to support each other in the hunt. Brothers may stay together for years.



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Physical Characteristics

The cheetah is yellowish with small black spots. Desert animals such as those that live in Namibia, tend to be paler with smaller spots and the "king cheetah," from southeast Africa (Kenya) has the largest spots. The tail of the cheetah has rings. In Hindi cheetah means "spotted one." The base color of the upper parts of an adult is tawny to bale bluff or grayish white, and the underparts are paler, often white. The coat is marked by round or oval black spots measuring .75 to 1.5 in. in diameter. The only exception to this is when recessive genes are inherited from both parents resulting in a more "blotchy" coat pattern. Cheetahs exhibiting this rare mutation were once thought to be a separate subspecies, but it is now known that they can appear in a litter of normal cheetahs. Only the white of the throat and the abdomen are unmarked with spots. The coat is coarse with the hair slightly longer at the nape than elsewhere. The last third of the tail is marked by four to six black rings and a bushy white tuft at the very end. The tail rings are distinctive on each cheetah and enable individual identification. The cheetah has a small head with short ears, high set eyes and a black line which looks like a tear drop running from the inner aspect of each eye down to the mouth. The teeth are small and the nasal passages are large. The body resembles that of a greyhound and is slim with very long legs. An adult cheetah measures 30 inches tall at the shoulder, 110 to 140 pounds. The cheetah exhibits slight sexual dimorphism with the males being the larger sex.

The cheetah is the fastest terrestrial mammal with a speed range up to 71 mph. This top speed can only be maintained for roughly 20 to 30 seconds. The cheetah completes four strides per second. Cheetah paws are less rounded and harder than most cats; this aids the cheetah in making quick turns. The claws are only semi-retractable and provide traction during running. Cheetah have reduced teeth compared to other large cats. This is perhaps because of their large nostrils, which are useful in quick air intake and do not leave room for the roots of larger teeth. Large lungs, liver, heart, and adrenals facilitate a rapid physical response. Cheetah have a long, fluid body which is streamlined over light bones. The tail acts to balance the body during quick turning. The spine functions as a spring for the back legs, which gives the cheetah added reach for each step. The black teardrops under each eye may enhance vision by minimizing glare from the sun.

Habitat

Currently, the cheetah is found in sub-Saharan Africa and Northern Iran. Cheetah favor areas with tall grass and shrubs. They also seek out areas with many elevated points from which to look for prey. They can frequently be found sitting or lying on a termite mound looking for prey.

Behavior

Female cheetahs are solitary, except when they have a litter. Young females leave their natal group, but usually occupy the same home range as their mother. Sibling males will often leave their natal group together and form coalitions. They seek out an area a great distance from their mother. It has been suggested that male coalitions help one another in hunting and defending a territory, thus securing access to receptive females. Male coalitions claim a range which may overlap several females' territories. Unrelated males are sometimes accepted into coalitions. It is rare to see a lone male. The only time a lone male can secure a territory is if there are no coalitions in the vicinity. Males and females mix only to mate. The males do not participate in cub rearing.

Diet

The cheetah is carnivorous. The diet consists primarily of gazelles, but also includes impalas, game birds, rabbits, and the young of warthogs, kudu, hartebeest, oryx, roan, and sable. Cheetah hunt in early morning and late afternoon (diurnal). They scan the country side from a tree limb, on top of a termite mound, or even the roofs of cars of observers in order to locate prey. Once they have located an animal that has strayed some distance from the group, the cheetah tries to get within fifty yards of the intended victim before accelerating. Full sprints last roughly twenty seconds and rarely exceed one minute. Most hunts fail. If the hunt is successful, the prey is usually knocked down by the force of the cheetah's charge and then seized by its throat and strangled. Smaller prey such as rabbits are usually killed by biting through the skull. A female with cubs may make a kill every day, whereas lone adults hunt every two to five days. Cheetah eat fast because if challenged for their food, they most often lose.

Reproduction

Females are polyestrous, with an average cycle of twelve days. Fertility lasts for one to three days. Breeding occurs throughout the year. A peak birth season has been noted during March through June. Gestation lasts 90 to 95 days. The number of young born can be one to eight, but is usually three to five. At birth cubs are on average 11.8 inches long and weigh 0.6 pounds. They are gray in color and have a mantle of mane-like hair along their back. It has been postulated that this mantle helps camouflage the cubs in the grass. The mantle begins to disappear at three months, but may still be seen at 2 years of age. During the first few weeks of life the cubs are moved every few days by their mother to avoid predators. The mother must leave the cubs alone to hunt, and during these times cubs often fall victim to predators. Infant mortality rates may be as high as 90%, with a majority being killed by lions. Cubs begin to follow their mother at 6 weeks of age. Cubs are weaned at three to six months. They usually remain with their mother for 13 to 20 months, during which time she teaches them to hunt. Sexual maturity is reached at 2 years of age.

Life Span

Life span in the wild can be up to 14 years, with an average at 7 years.

Predators

Cheetah cubs are often killed by lions.

Interesting Facts

- Fastest land animal, cheetahs sprint 60 miles per hour
- Tail acts as a rudder to turn quickly
- The cheetah originated roughly four million years ago, before any of the other big cats. The oldest fossils have been found in North America in what is now Texas Nevada, and Wyoming. Until the end of the last Ice Age (about 10,000 years ago) the cheetah was common in North America, Asia, Africa, and Europe.

Chimpanzee

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Chimpanzee

Noisy and curious, intelligent and social, the chimpanzee is the mammal most like a human. Chimpanzees fascinate humans and are favorites both in zoos and the wild.

Three subspecies of common chimpanzees are distributed across the forest zone of Africa from Guinea to western Tanzania and Uganda. Another species of chimpanzees, the bonobo (*Pan paniscus*), is found exclusively in central Democratic Republic of Congo. In East Africa the chimpanzee is found in the wild in Tanzania and Uganda, but only in captivity in Kenya. Gombe National Park in Tanzania is the first park in Africa specifically created for chimpanzees.



Physical Characteristics

The chimpanzee has a thickset body with long arms, short legs and no tail. Much of the body is covered with long black hair, but the face, ears, fingers and toes are bare. They have hands that can grip firmly, allowing them to pick up objects. The discovery that they used "tools" for certain purposes surprised the world.

Habitat

Chimps are mainly found in rain forests and wet savannas. While they spend equal time on land and in trees, they do most of their feeding and sleeping in trees.

Behavior

Chimps live in groups called troops, of some 30 to 80 individuals. These large groups are made up of smaller, very flexible groups of just a few animals, perhaps all females, all males or a mixed group.

Chimps sometimes chew leaves to make them absorbent and then use them as a sponge, dipping them in water and sucking out the moisture. They also use grass stems or twigs as tools, poking them into termite or ant nests and eating the insects that cling to them. They are able to wedge nuts between the roots of a tree and break the shells open with a stone.

Chimps are both arboreal and terrestrial, spending much of their daytime hours on the ground. They are quadrupedal, walking quickly on all fours with the fingers half-flexed to support the weight of the forequarters on the knuckles. They occasionally walk erect for short distances.

Chimps are agile climbers, building nests high up in trees to rest in during midday and sleep in at night. They construct new nests in minutes by bending branches, intertwining them to form a platform and lining the edges with twigs. In some areas chimps make nests on the ground.

Diet

Chimps are diurnal (but often active on moonlit nights) and begin their activities at dawn. After descending from their night nests they hungrily feed on fruits, their principal diet, and on leaves, buds and blossoms.

After a while their feeding becomes more selective, and they will choose only the ripest fruit. They usually pick fruit with their hands, but they eat berries and seeds directly off the stem with their lips. Their diet consists of up to 80 different plant foods.

Reproduction

The female chimp has an estrus cycle of about 34 to 35 days. While in heat, the bare skin on her bottom becomes pink and swollen, and she may mate with several males. She normally gives birth to just one baby, which clings tightly to her breast and, like a human baby, develops rather slowly. An infant can sit up at 5 months and stand with support at 6 months. It is still suckled and sleeps with its mother until about 3 years of age, finally becoming independent and separating from her at about 4 years. Sexual maturity is reached between 8 and 10 years.

Chimps are among the noisiest of all wild animals and use a complicated system of sounds to communicate with each other. A loud "wraaa" call, which can be heard more than a mile away, warns of something unusual or disturbing. They hoot "hoo-hoo-hoo," scream, grunt and drum on hollow trees with the flat of their hands, sometimes for hours.

Chimps touch each other a great deal and may kiss when they meet. They also hold hands and groom each other. An adult chimp often has a special "friend" or companion with which it spends a lot of time. Female chimps give their young a great deal of attention and help each other with babysitting chores. Older chimps in the group are usually quite patient with energetic youngsters.

Predators

The number of chimps in the wild is steadily decreasing. The wilderness areas necessary to their survival are disappearing at an alarming rate as more forests are cut down for farming and other activities. As the human's closest relative the chimp is vulnerable to many of the same diseases, and their capture for medical research contributes to their decline, especially in West Africa. As more forests are cut down for farm activities. In addition, recent outbreaks of the incurable disease Ebola hemorrhagic fever, threaten to decimate important chimpanzee populations in the Republic of Congo and Gabon.

Interesting Facts

- Chimpanzees use large sticks and branches as clubs or throw them at enemies like leopards and humans.
- Chimps supplement their diets with meat, such as young antelopes or goats. Their most frequent victims, however, are other primates such as young baboons, colobus monkeys and blue monkeys.

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Dikdik (Swahili name digidigi)

Dikdiks are tiny antelopes of dainty appearance that are slightly larger than a hare. Even so, they are not the smallest antelopes in Africa. That distinction goes to the dwarf royal antelope of West Africa. The other very small antelope in Africa is the suni, somewhat smaller than the dikdik.

The five species of dikdik, with the exception of Kirk's dikdik, are only found in eastern and northeastern Africa. Kirk's dikdik, which is described here, is one of the most common. It is also found in southwestern Africa.

Physical Characteristics

Females are slightly larger than the males. Only the males have horns, which are small, spike-like and incline backwards.



They are about 14 to 16 inches at the shoulder, and weigh about 10 to 12 pounds.

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The head sometimes does not seem to be in proportion to the dainty body. A shaggy crest of hair on the crown, which at times almost obscures the horns, is raised when the animal is alarmed. Dikdiks have elongated snouts that look like a little proboscis, or trunk. The nose is mobile with the upper end slightly forked, an interesting adaptation to living in hot, dry climates. It is enlarged, and the inside passage functions as a blood-cooling mechanism when the bellows-like muscles increase the airflow into the nose. The blood is pumped to the nose where airflow and subsequent evaporation cools the blood before it is recirculated back to the body. This is just one of several mechanisms the dikdik uses to reduce water loss.

Kirk's dikdik comes in various shades, ranging from grizzled gray to rusty brown, with lighter underparts of the body. Coloration depends on habitat the drier semi-desert areas usually have the paler individuals. Dikdiks have large dark eyes, each surrounded by a white ring. A black spot below the inside corner of each eye contains a pre-orbital gland that produces a dark sticky secretion. Dikdiks insert grass stems and twigs into the gland to mark them with secretions.

Habitat

Dikdiks live in various habitats with good cover and plentiful browse, but without tall herbage. They are known to move to different ranges when grasses grow too high and obstruct their view.

Behavior

Dikdiks live in pairs in fixed territories covering up to 12 acres each. They mark their territory at strategic places along the borders that meet or overlap with other dikdik territories and drop their dung on dung left in their territory by other animals, even elephants. Both males and females help defend the territory and prevent the entry of other females.

The territories are often located in low, shrubby bush along dry, rocky stream beds where there are plenty of hiding places. Dikdiks maintain a series of runways through and around the borders of their territories.

Sight, scent and hearing are well-developed, and dikdiks are very alert. They know their territories intimately and respond to the alarm calls of other animals. When in danger they tend to hide instead of flee from a predator.

Diet

Dikdiks eat foliage, shoots, fruit and berries. They are nocturnal, therefore feeding mostly at night. They do not need to drink.

Reproduction

Dikdiks live as monogamous pairs in their territories and are almost always accompanied by the latest young. After a fawn is born, the female can become pregnant again within 10 days. Their high-quality browse diet is probably what allows a female to be pregnant and lactate at the same time.

At birth a fawn weighs about 11/2 pounds and spends its first weeks lying out. The mother hides her fawn and comes back to suckle it several times a day, changing the hiding place every few days. At 3 weeks the fawn is feeding on vegetation and is usually weaned between 8 and 10 weeks.

The young dikdik reaches sexual maturity between 6 and 8 months. At this time, or soon after the birth of another fawn, the parents chase it out of the territory. It may pair up with a dikdik that has lost its mate in an established territory, or it may find a young mate and establish a new territory.

Predators

Their predators are numerous, including monitor lizards, eagles, pythons, smaller cats such as the caracal, as well as lions, cheetahs, hyenas, wild dogs and humans. Even though small, with sticklike legs, the dikdik can put up a good defense, sometimes doing considerable damage with its razor-sharp hooves.

People have long hunted dikdiks, setting snares along their runways. Small bones from the dikdik's legs and feet are used in traditional jewelry.

Interesting Facts

- When frightened or disturbed, the dikdik produces a whistling sound through the nose that sounds like "zik-zik," from which its name is probably derived.
- Salt is important to the dikdik's diet, but it does not need to drink as sufficient liquid is contained in the plants it consumes.

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Elephant

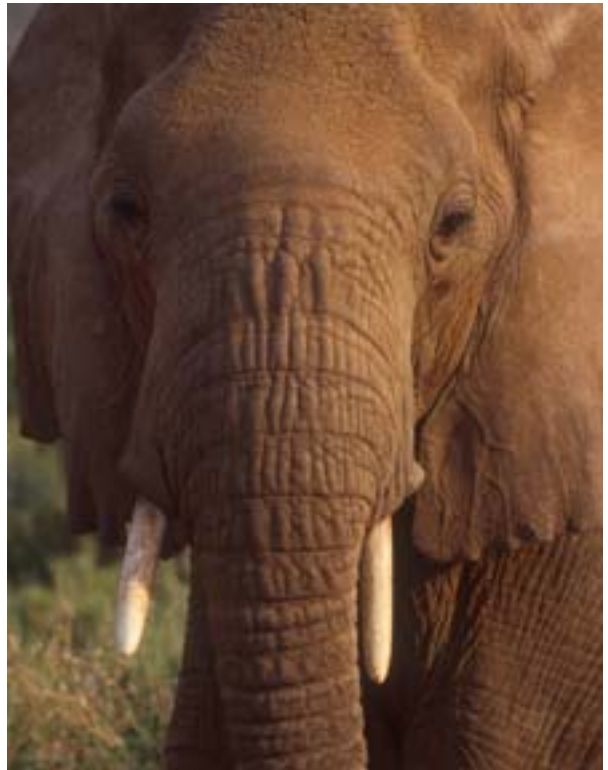
The African elephant, the largest living land mammal, belongs to the family *Elephantidae*, which includes only one other smaller relative, the Asian (or Indian) elephant. African elephants once ranged from south of the Sahara Desert to northern South Africa. Today, African elephants are now mostly confined to parks and reserves.

Physical Characteristics

The length of the head/body of the adult male is 18-24 feet. The shoulder height of the adult male is 10-13 feet. The weight of the adult is 8,800-15,500 pounds.

Although African and Asian elephants look much alike, there are several physical characteristics that distinguish them from one another. African elephants are larger in size, have bigger fan-like ears and have a single hump on their forehead, a sway back, more wrinkled skin and a trunk that has two finger-like projections at its tip, one at the top, and one at the bottom.

Male and female African elephants grow large tusks; male Asian elephants usually have smaller tusks and tusks of Asian females are not visible beyond the lips. Tusks are elongated upper incisors, one on each side of the jaw. They begin to appear at age two, and grow throughout the animal's lifetime. Tusks are used for fighting, pushing, lifting and digging for water.



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Most physical growth occurs by age 15, and top mental ability is reached at ages 30-45. Elephants have four molars, which are replaced five times, for a total of six sets in a lifetime. Death comes when the last set of molars wear out and the animal can no longer eat.

The African elephant is an endangered species. This is due to poaching for ivory and loss of habitat. Where elephants once roamed over millions of square miles of habitat, today they are restricted to overcrowded parks and reserves. Although there are an estimated 500,000 African elephants left in the wild today, their future survival in the wild hangs in the balance. Most older and larger elephants have been killed for ivory and sport. Elephants reach their physical and mental prime at about 40 years of age, but today their average age has dropped to 24 years old.

Habitat

African elephants are native to a wide variety of habitats including semi-desert scrub, open savannas and dense forest regions. Their habitat ranges from sea level to 16,000 feet.

Behavior

African elephants live in socially complex 'family units' comprising of related adult cows and their immature offspring. A family unit usually comprises of eight to 10 animals and is led by the matriarch, usually the oldest, largest, dominant cow. During times of danger, such as severe drought or intense poaching, many family units will come together to form a large herd comprised of 500-1,000 individuals.

When young male elephants reach puberty at around 12-15 years of age, they become more independent and strike out on their own or are driven out by the family unit's females. At this time, males either roam alone or

gather together to form small, loosely bonded "bachelor" herds, from which they come and go at will. Bulls temporarily rejoin female-centered units, especially when females are sexually receptive. When males reach about 25 years of age, they experience a phenomenon called musth (pronounced must); in Hindi, musth means 'intoxicated.' During musth, a bull's testosterone blood level skyrockets, and he becomes dangerously aggressive, unpredictable and highly competitive with other bulls for females. Females appear to prefer males in musth for mating.

Diet

In the wild elephants feed mainly on grass, tree foliage, bark, roots, shrubs, fruit and soil for its mineral content. Full-grown elephants consume about six to eight percent of their own body weight in vegetation each day. To accomplish this, they spend as many as 18 hours per day feeding. These massive animals can drink 26 gallons of water at one time and, when thirsty, more than 55 gallons within minutes.

Reproduction

Females (cows) mature sexually at around 9-12 years old and reproduce until ages 55-60. Females produce calves at intervals of about every five years. Although males (bulls) reach sexual maturity around age 10, they often do not breed until they are about 30 when they become large and strong enough to compete successfully for females with other large male elephants. The gestation period lasts about 22 months (630-660 days) after which one calf is born; twins are rare. Average calf birth weight is about 265 pounds. Young suckle with their mouth (not trunk) and may not be fully weaned until the birth of the next calf.

Life Span

Life span is about 50-60 years.

Predators

While adult elephants have no natural predators, young elephants are occasionally preyed on by lions, hyenas or crocodiles.

Interesting Facts

- Mild-tempered male elephants usually have the largest tusks because they tend to avoid behaviors such as combat and tree ramming which break tusks!
- A trunk weighs about 400 pounds, can hold up to 2.5 gallons of water, contains at least 40,000 muscles (possibly up to 100,000) and is so dexterous that it can pick up a grain of rice.

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Gazelle – Thomson's and Grant's Gazelle

Grant's gazelles resemble Thomson's gazelles, and the two species are often seen together. They are similarly colored and marked, but Grant's are noticeably larger than Thomson's and easily distinguished by the broad white patch on the rump that extends upward, beyond the tail and onto the back. The white patch on the Thomson's gazelle stops at the tail. Some varieties of Grant's have a black stripe on each side of the body like the Thomson's gazelle; in others the stripe is very light or absent. A black stripe runs down the thigh.

Physical Characteristics

The various types of Grant's gazelle differ mainly in color and in the size and shape of the horns. Grant's are large, pale, fawn-colored gazelles with long legs. The males are larger and heavier and their horns longer than the females.

The lyre-shaped horns are stout at the base, clearly ringed and measuring from 18 to 32 inches long. The width of the spaces between the horns and the angles of growth differ among the various types of Grant's gazelles. One type, in northwest Tanzania, has widely diverging horns, with the tips directed downwards.

On the females, black skin surrounds the teats, with white hair on the udder. This probably helps the young recognize the source of milk. When a fawn is older and moving about with its mother, the dark stripe on the white background may serve as a beacon for it to follow.

Habitat

Grant's gazelles are especially fond of open grass plains, and although they frequent bushy savannas, they avoid areas of high grass.

Behavior

Grant's gazelles may remain in areas where food is plentiful. Mature males establish territories they may hold as long as eight months. A male tries to detain the female herds of 10 to 25 individuals as they pass through these territories while they move about to feed. At the same time males chase off rival males and try to mate with females in estrus.

Grant's gazelles have developed several ritualized postures. For example, the territorial male stretches and squats in an exaggerated manner while urinating and dropping dung. This apparently warns other males to stay away and reduces the number of confrontations. Younger males will fight, but as they grow older the ritualized displays often take the place of fights. When fighting does occur, it also is ritualized. It starts with "pretend" grooming, repeated scratching of the neck and forehead with a hind foot and presenting side views of the body. If neither combatant is intimidated, they may confront one another and clash horns, trying to throw the other off-balance.

Diet

The gazelles vary their diet according to the season. They eat herbs, foliage from shrubs, short grasses and shoots. Grant's gazelles are not restricted to certain habitats by a dependency on water, but obtain the moisture they need from their food. Grant's have unusually large salivary glands, possibly an adaptation for secreting fluid to cope with a relatively dry diet. They typically remain in the open during the heat of the day, suggesting an efficient system to retain the necessary fluid in their bodies.



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Reproduction

Breeding is seasonal, but not firmly fixed. Gestation is approximately 7 months, and the young are born in areas that provide some cover. The newborn fawn is carefully cleaned by the mother who eats the afterbirth. Once the fawn can stand up and has been suckled, it seeks a suitable hiding place. The mother watches carefully and evidently memorizes the position before moving away to graze. She returns to the fawn three to four times during the day to suckle it and clean the area. The lying-out period is quite long—two weeks or more.

The fawn eats its first solid food at about 1 month, but is nursed for 6 months. Grant's become sexually mature at about 18 months. By that time the young males will have joined an all-male bachelor herd, but it will be some time before they become territory holders, if at all. Males from the bachelor herds challenge the territorial males, but only the strongest win territories, which they mark with combined deposits of dung and urine.

Predators

All the major predators kill Grant's gazelle, but cheetahs and African hunting dogs are the most prevalent. In some areas jackals prey on the young. Because of its adaptation to semi-arid and sub desert ranges as well as its good meat and valuable skin, Grant's gazelle has been one of the species that scientists consider as a potential source of protein for humans.

Interesting Facts

- The only relatively long-lasting relationship in gazelle society is that of a mother and her most recent offspring.
- Grant's are gregarious and form the usual social groupings of small herds of females with their offspring, territorial males and all-male bachelor groups. Membership in these groups is temporary.

Animals of Africa

Gerenuk (long necked gazelle)

Gerenuk means "giraffe-necked" in the Somali language. It is also called "swala twiga" or giraffe gazelle in Swahili.

Though normally shy, these graceful animals are easily observed in Samburu National Reserve in Kenya and in various other semi-arid areas of East Africa, including parts of Tanzania, Somalia and Ethiopia.

Physical Characteristics

Its most outstanding characteristic is its exceptionally long neck, from which it gets its name. The gerenuk's head is small for its size, but its eyes and ears are large. Only the males have horns, which are stout and heavily ringed, and they have a more heavily muscled neck than the females do. They are brown on the upper back and lighter on the sides. The short tail looks longer as it ends in tuft of black hair.

Like many other gazelles, gerenuks have preorbital glands in front of the eyes that emit a tar like, scent-bearing substance they deposit on twigs and bushes to mark their territory. They also have scent glands on their knees that are covered by tufts of hair and between their split hooves.

The gerenuk stands 35 to 40 inches at the shoulder and is 80 – 115 pounds.

Habitat

Gerenuks are found in habitats with woody vegetation, especially dry, flat thorn bush.

Behavior

Gerenuks live in small groups, which may be made up of related females and their young, or in bachelor groups of males or as solitary males. The latter are thought to be territorial, but as their ranges are large and populations usually sparse, it has been difficult for scientists to determine if they defend these territories. The female groups wander over a home range of 1 to 2 square miles, passing in and out of male territories.

Diet

The gerenuk is an herbivorous browser.

It is another example of a species fitting a specialized niche in a complex ecosystem. Although some animals do compete for the same foods, many of the different species frequently seen together do not feed on the same plants, or they eat them at different stages of growth or at different heights. Gerenuks, for example, feed at higher reaches than those of other gazelles and most antelopes. They stand erect on their hind legs, with their long necks extended, to browse on tall bushes.

By using their front legs to pull down higher branches, they can reach leaves 6 to 8 feet off the ground. The tender leaves and shoots of prickly bushes and trees make up most of their diet, along with a nutritious mix of buds, flowers, fruit and climbing plants. They do not eat grass nor do they require water. As they can get enough moisture from the plant life they eat, they can survive in dry thorn-bush country and even in desert.

Life Span

The life span of the gerenuk is about 20 years



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Reproduction

When ready to give birth, the female leaves the group and goes to a secluded spot. After delivery she licks the fawn clean and eats the afterbirth, possibly for the nutrients it contains and to prevent the scent from attracting predators. The adaptation to year-round browsing may permit gerenuks to bear young at any time instead of just before the rainy season, as is the practice for grazing animals.

The gestation period is about 7 months.

During the first weeks of its life, or until it can keep up with adults, the baby gerenuk spends its time hidden in the bush while its mother feeds. She returns to the fawn three or four times a day to suckle it, carefully cleaning or eating its waste to leave no trace of scent. Females bleat softly to communicate with their young.

Predators

Gerenuks are preyed upon by cheetahs, leopards, lions, jackals, wild dogs and humans.

Related Heartlands

- Maasai Steppe Heartland
- Samburu Heartland

Interesting Facts

- Gerenuks use several vocalizations, including a buzzing sound when alarmed, a whistle when annoyed and a loud bleat when in extreme danger.
- In their courtship ritual, the male gerenuk approaches a female in heat and repeatedly taps her with one of his front legs under the belly or on the flanks. He may rub her with his preorbital glands to deposit his scent before mating.

Animals of Africa

Giraffe, Reticulated (Giraffa camelopardalis)

Giraffes belong to the family Giraffidae, which has only one other species, the okapi. There are nine recognized subspecies of giraffe: Nigerian (*G.c. peralta*), Kordofan (*G.c. antiquorum*), Nubian (*G.c. camelopardalis*), reticulated (*G.c. reticulata*), Rothschild (*G.c. rothschildi*), Maasai (*G.c. tippelskirchi*), Thornicroft (*G.c. thornicrofti*), Angolan (*G.c. angolensis*) and South African or Cape (*G.c. giraffa*).*

All subspecies of giraffe are distinguished by their coat pattern and geographical distribution.

Giraffes have long legs, a long, narrow head with small horns, and peculiar, lobed lower canines.

Physical Characteristics

The coat pattern of the reticulated giraffe is made up of straight-edged patches of chestnut colored brown separated with white reminiscent of tiles and grout. The Rothschild reticulated giraffe has white legs from the knee down with no pattern below the knee.

The Maasai giraffe has irregularly shaped dark brown patches on a tan background.

The giraffe, with its distinctive long neck, is the tallest living animal.

Adult males stand 15-18 feet tall, whereas females are shorter at 13-16 feet tall. Adult males weigh between 1,764-4,255 pounds, while females weigh only 1,213-2,601 pounds.

Giraffes live for 10-15 years in the wild, but average 25 years at zoos.

The front legs of the giraffe are longer than the back legs. In the giraffe, both sexes have horns. The horns are different from those found in other mammals in that they form as cartilage, turn to bone from the tips down, and are covered with skin. It has a long copiously tufted tail.

Diet

In the wild: Various species of acacias. They also browse from the leaves and shoots of trees or shrubs of other species, but they are selective.

The giraffe's great height means that, to drink water it must splay its front legs, and even bend at the knees. When upright, its heart has to pump blood upward at enormous pressure to reach the brain, but when the head lowers to drink, a series of one-way valves regulate the blood's force and flow to prevent damage to the brain.

Habitat

Giraffes live in both open savanna areas and wooded grasslands. Giraffes live mostly in eastern sub-Saharan Africa, while certain populations also live in the western and southern parts of the continent. The reticulated giraffe is commonly found in the Samburu region, in north eastern Kenya.

Reproduction

Giraffes reach sexual maturity in captivity at 3-4 years of age. However, in the wild, males may not breed until



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ages 6 or 7, due to a system of hierarchy among bulls. In contrast to the male breeding age, females must be physically larger to carry offspring. Breeding season can occur at any time. Gestation is usually 13-15 months.

In the wild, birth occurs in the dry months, but in captivity, births can happen year-round. The mother delivers a single calf while standing upright. At birth, calves weigh 104-154 pounds, and stand 72-76 inches tall. Calves grow about 1.2 inches per day during the first week, and are 10 feet tall by age 1. Calves can walk within an hour of birth, and usually can run within 24 hours.

Young may suckle for up to a year, but they start to sample plants just a few weeks after birth. Calves are ready to leave the protection of their mother after 15-18 months of development. Less than 50% of all baby giraffes survive the first year of life, due to predation from hyenas, leopards and wild dogs. As giraffes increase in age, their main predators become lions and humans.

Life Cycle

Giraffes live in loosely bound, scattered herds of 10-20 (up to 100), and may contain any possible combination of sexes and ages. Males establish and maintain their hierarchy by "necking" contests, or occasional violent sparring matches. Each individual knows its relative status in the hierarchy, which minimizes aggression. The top-ranked male has first choice to the best feeding areas and ovulating females.

Males and females feed from different parts of trees; the male chooses higher branches, and the female forages from the lower ones. This behavior ensures that the sexes don't compete for food within a given range.

Behavior

Growing to an impressive height gives giraffes access to a level of foliage beyond reach of all other large browsers, save the elephant. Along with their height, giraffes have an incredible array of adaptations. For example, their skin coloring provides excellent camouflage, as it is several different patches of variable size and color. The skin is thick for protection and insulation. Also, the giraffe's long eyelids keep out ants and sense thorns on the branches of the trees from which they browse. The valves in veins of the neck control a huge rush of blood to the head when leaning over; this prevents unconsciousness. There is also a network of capillaries in the brain called the "wonder-net." It acts a bit like a shock absorber and is another part of the system that prevents unconsciousness.

A giraffe's tongue is over 18 inches (46 cm) long, and the roof of the mouth is grooved to easily strip leaves off branches. Since giraffes are extremely efficient at processing nutrients and liquids from food, they can survive without water for long periods of time.

Giraffes ruminate at day or night, interspersed with periods of sleeping. They also rest with their eyes open, standing or lying for three to five minutes at a time. Throughout the night, a giraffe may deeply sleep for five to 10 minutes lying down, yet they rarely sleep more than 20 minutes total per day.

Interesting Facts

- A giraffe's heart can pump 16 gallons of blood in one minute!
- Giraffes have the largest eyes of any land mammal!
- Other animals on the savanna (such as zebras, ostriches, antelopes) use giraffes as watchtowers or observation posts for predators!
- Giraffes have one of the highest blood pressures of all animals, due to their height and the large size of their heart. Because of this, their veins and arteries are much thicker compared to other large mammals.

Animals of Africa

Hippopotamus (Hippopotamus amphibius)

The hippopotamus (hippo) belongs to the family Hippopotamidae, which includes two species, the hippopotamus (*H. amphibius*) and the pygmy hippopotamus (*Choeropsis liberiensis*). The hippo lives in western, central, eastern and southern parts of Africa.

Physical Characteristics

Hippos have a head and body length of 10.8–11.3 feet. Males are normally larger and weigh more than females. Hippos range in weight from about 1,764–7,056 pounds.

Diet

In the wild: Numerous species of short grasses.

Habitat

The hippo inhabits rivers and lakes, and wallows during the day. At night, hippos graze in short grasslands.



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Reproduction

Females become sexually mature between the ages of 7–15, but usually by the age of 9. Males become sexually mature between the ages of 4–11, but usually by age 7. Mating season coincides with the dry season when hippo populations are concentrated at water sources. Mating usually occurs in the water, and females are sometimes completely submerged. As a result, females must push their heads above water to take occasional breaths of air.

Hippos reproduce about every two years in the wild. Gestation lasts from 190–210 days, with births occurring during the rainy season. The female gives birth to her offspring on land or in shallow water. Newborns weigh about 93 pounds. The mother and her offspring will stay separate from the herd for 10–14 days after birth. She weans the offspring about 8 months after birth.

Life Span

Hippos can live up to 45 years in the wild.

Behavior

Female hippos with offspring usually live in groups of 10–15 individuals, but researchers have noted groups of up to 150. Adult males are solitary but sometimes form bachelor groups. Solitary males are usually territorial and their territories often include a group of females with their offspring. Males maintain their territories for 4–8 years and during this time, hold the exclusive mating rights to resident females. Non-territorial males do not breed. At a lake, a male's territory consists of a strip of water and the adjacent land, approximately 820–1,640 feet in length. At a river, territory is usually about 164–328 feet in length.

In Greek, hippopotamus means "river horse." This name suits the hippo, which spends its days in or near water. At night, aquatic groups of hippos disperse, as individuals go to shore, and females and their infants stay together. Hippos follow onshore trails marked with dung piles to grazing fields, feed for about 5–8 hours, then return to the water before dawn or early in the morning.

Hippos are excellent swimmers but prefer to amble along the bottom of slow-moving or stagnant water. An adult hippo can stay under water for up to five minutes. Since hippos are such large animals, they greatly affect their habitats. In water, hippos deposit tons of excrement, which fertilizes plants and feeds animals, such as fish. However, hippos are not as beneficial on the land. They overgraze grass fields and their big feet trample the wet ground around lakes and rivers thereby causing erosion.

Hippos are hosts to many creatures. Birds, such as hammerhead storks and cattle egrets, use hippos as perches for fishing while hippos stand in water. Birds pick flies, ticks and other insects off the skin of hippos. These birds do the hippos a favor by removing the pesky bugs. Another creature which hippos play host to is the *Oculotrema hippopotami*, a parasitic fluke found on 90% of all hippos' eyes. In the water, certain fish species eat algae and other deposits off the hippos' skin.

Interesting Facts

- Hippos can open their mouths up to 150 degrees wide!
- Hippos excrete a red liquid from their pores, which protects their skin from sun and infection!
- Adult hippos have only two enemies in the world: other hippos and humans.

Animals of Africa

Impala

The graceful impala is a slender, medium-sized antelope so adaptable that it is found from southern Africa to the northern limits of East Africa.

Physical Characteristics

The body is reddish-brown with white hair inside the ears, over each eye and on the chin, upper throat, underpants and buttocks. A narrow black line runs along the middle of the lower back to the long tail, and a vertical black stripe appears on the back of each thigh. Unlike other antelopes, impalas have large, brush like tufts of long, coarse black hair that cover a scent gland located just above the heel on each hind leg. The impala is between 28 and 36 inches tall and weigh between 100 and 135 pounds.



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Habitat

Impalas are found at grassland and woodland edges, usually very close by water.

Behavior

Their social organization allows impalas to adapt to prevailing environmental conditions. When food is plentiful, the males become territorial. In home ranges averaging 3 square miles, six to eight dominant males set up territories. They stand with erect posture, rub scent from face glands and make dung heaps to mark their territory.

The females form herds of 10 to 50 or more and wander in and out of male territories. If they start to leave the territory, the male tries to herd them back to the center, or he feigns danger just beyond his boundary by taking a stance normally used as a warning sign. He tries to mate with females in estrus and defends his territory from challenging males. Bachelor males are allowed to remain in male territories if they ignore the females.

The territorial male's challenger will have worked his way up through the hierarchy of the bachelor group until he becomes the dominant male. He then leaves the group and challenges a territorial male through horn duels, in which the males approach one another with slow, deliberate steps. At a signal, such as swiveling the eyeballs to show the whites or slightly nodding the head, they rush forward and clash horns, attempting to throw one another off balance. Although fighting can be fatal, males are protected by exceptionally thick skin over vulnerable areas. It is not the length of horn that gives a male the advantage but his condition and weight. When a territorial male begins to lose weight from his frantic activity, he is defeated and must return to the bachelor group to recuperate. There are times, however, when this territorial system is not maintained. In drier years the animals have to travel further to obtain food, and many smaller herds of females form. They move in and out of the territories so often that the males are very quickly exhausted. When this happens, territories are abandoned, and large, mixed tranquil herds of females and males form. When feed conditions improve, impalas revert to the territorial system.

Diet

Impalas eat tender young grass shoots in the wet season and herbs and shrubs at other times. During the dry season they must drink daily.

Reproduction

The gestation period is between 6 and 7 months. In East Africa young are born year round, but birth peaks usually coincide with the rains. The female leaves the herd and seeks a secluded spot to bear her fawn. After giving birth she cleans the fawn and eats the afterbirth. If the fawn is born at a time when there are few other young around, the mother will stay with it in seclusion spot for a few days or even leave it lying out for a week or more before returning to the herd. If there are many other fawns, she may take hers back to the herd in a day or two, where a nursery group may form. Because predators have more difficulty selecting an individual from a nursery group, the fawns are safer there.

The young are suckled for 4 to 6 months and grow rapidly, reaching maturity at a little over a year. The young males, however, are evicted from their mothers' groups when they are 6 months old, staying around the edges of the herd until they join a bachelor group. During this transition period they are most vulnerable to predators. Males will not be mature enough to hold a territory until they are 5 or 6 years old.

Life Span

The life span of impala is about 12 years.

Predators

The young are killed by jackals and the smaller cats, baboons, eagles and pythons. The impala are hunted by lions, leopards, cheetahs, hyenas, and hunting dogs. When in danger, impalas will "explode" in a magnificent spectacle of leaping. In their zigzag leaps, they often jump over and across their companions, probably to confuse predators. They perform a high kick of the hind legs, a movement thought to release scent from the glands on the heels, making it easier for them to stay together.

Interesting Facts

- The female is similar to the male but does not have horns. The male's graceful lyre-shaped horns are 18 to 37 inches long.
- During periods of intense mating the male vocalizes loudly, making a sound between a lion's roar and a dog's bark. Exhausted by such activity, males seldom can hold their territories for more than a few months at a time.

Animals of Africa

Leopard (*Panthera pardus*)

The most secretive and elusive of the large carnivores, the leopard is also the shrewdest. Pound for pound, it is the strongest climber of the large cats and capable of killing prey larger than itself.

Physical Characteristics

Leopards come in a wide variety of coat colors, from a light buff or tawny in warmer, dryer areas to a dark shade in deep forests. The spots, or rosettes, are circular in East African leopards but square in southern African leopards. They are about 28 inches at the shoulder and weigh about 140 pounds



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Habitat

Dense bush in rocky surroundings and riverine forest are their favorite habitats, but leopards adapt to many places in both warm and cold climates. Their adaptability, in fact, has helped them survive the loss of habitat to increasing human settlement. Leopards are primarily nocturnal, usually resting during the daytime in trees or thick bush. The spotted coat provides almost perfect camouflage.

Behavior

When a leopard stalks prey, it keeps a low profile and slinks through the grass or bush until it is close enough to launch an attack. When not hunting, it can move through herds of antelopes without unduly disturbing them by flipping its tail over its back to reveal the white underside, a sign that it is not seeking prey.

Leopards are basically solitary and go out of their way to avoid one another. Each animal has a home range that overlaps with its neighbors; the male's range is much larger and generally overlaps with those of several females. A leopard usually does not tolerate intrusion into its own range except to mate. Unexpected encounters between leopards can lead to fights.

Leopards growl and spit with a screaming roar of fury when angry and they purr when content. They announce their presence to other leopards with a rasping or sawing cough. They have a good sense of smell and mark their ranges with urine; they also leave claw marks on trees to warn other leopards to stay away.

Leopards continually move about their home ranges, seldom staying in an area for more than two or three days at a time. With marking and calling, they usually know one another's whereabouts. A male will accompany a female in estrus for a week or so before they part and return to solitude.

Diet

As they grow, cubs learn to hunt small animals. The leopard is a cunning, stealthy hunter, and its prey ranges from strong-scented carrion, fish, reptiles and birds to mammals such as rodents, hares, hyraxes, warthogs, antelopes, monkeys and baboons.

Reproduction

A litter includes two or three cubs, whose coats appear to be smoky gray as the rosettes are not yet clearly delineated. The female abandons her nomadic wandering until the cubs are large enough to accompany her.

She keeps them hidden for about the first 8 weeks, giving them meat when they are 6 or 7 weeks old and suckling them for 3 months or longer. The gestation period is 2 ½ months.

Life Span

Leopards do well in captivity, and some have lived as long as 21 years.

Predators

Leopards have long been preyed upon by man. Their soft, dense, beautiful fur has been used for ceremonial robes and coats. Different parts of the leopard the tail, claws and whiskers are popular as fetishes. These cats have a reputation as wanton killers, but research does not support the claim. In some areas farmers try to exterminate them, while in others leopards are considered symbols of wisdom.

Related Heartlands

- Kazungula Heartland
- Maasai Steppe Heartland
- Samburu Heartland

Interesting Facts

- The elegant, powerfully built leopard has a long body, relatively short legs and a broad head. Its tawny coat is covered with dark, irregular circles called "rosettes."
- Both lions and hyenas will take away a leopard's kill if they can. To prevent this leopards store their larger kills in trees where they can feed on them in relative safety.

Animals of Africa

Lion (*Panthera leo*)

Along with all other cats, African lions are in the order Carnivora and the family Felidae. Felidae has 18 genera and 36 species. Lions and other big cats such as tigers, leopards and jaguars, are in the genus *Panthera*.

African lions live in Senegal east to Somalia, East Africa, Angola, northern Namibia and from Kalahari east to Mozambique and northern Natal. Prides on the Serengeti maintain and fiercely defend home ranges of 8-160 square miles. Some lions are nomadic with a range of up to 1,600 square miles.

Physical Characteristics

The head and body of males measure from 5.6-8.3 feet in length. The tail adds an extra 3 - 3.5 feet in length. They stand approximately 4 feet at the shoulder. Female African lions are 4.6-6 feet in length, with an equally long tail. Females are also shorter, approximately 3.5 feet at the shoulder. Male African lions weigh between 330 -550 pounds, while females weigh between 264 - 400 pounds.

Both male and female lions are tan in color, effectively camouflaging them among the light-colored savanna grasses. However, male and female African lions are distinctly sexually dimorphic (there are observable physical differences between the sexes). Males have a mane that ranges in color from light to dark brown, to even black. The mane helps protect the male's neck during fighting and make him appear larger to competitors.

Habitat

Their primary habitat is grassy plains, savanna and open woodlands.

Life Span

In the wild, males live 12 -16 years, females 15 -18 years. In captivity, they live about 20 years.

Behavior

Lions are primarily nocturnal or crepuscular (becoming active at dusk or just before dawn). They spend much of their time resting—often up to 20 hours per day. They rest for several reasons, including energy conservation, lack of prey, and to avoid the heat of the day. During periods of rest, lions have many opportunities for social behavior. They gather to sleep in a group, rub their heads together, and play; all of these behaviors reinforce social bonds.

Life in a group allows lions to cooperatively hunt for food. Female members of a pride may spread out around potential prey to attack from many directions. Generally, lions hunt by stalking, since they are not built for endurance running.

While hunting, lions usually give up a chase after 50 -110 yards. Lions strangle or suffocate larger prey by clamping down on their neck. Or, to prevent it from breathing, a lion may place its paw over the nose, mouth or windpipe of prey. A lion easily dispatches smaller prey with a swipe from one of its massive paws.

Lions are unique among the cats, since they live in large social groups called prides. A lion pride frequently has 20 or more individuals, typically two males, several females and their offspring. The pride's adult females are usually related to one another and are group members for life. On the other hand, the males are irregular members who must fight off competing males for leadership of their pride. Males remain with a pride only as



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to

long as they are strong enough to defend their group from other male pairs. A male pair normally remains with a pride for 3-6 years before other males force them away.

Diet

Prey generally consists of wildebeest, zebra and a variety of other mammals such as giraffes, buffalo and gazelles. Occasionally, lions hunt the young of elephants, rhinoceros or hippopotamus. They also sometimes scavenge food, chasing away hyenas and other carnivores from their kills.

Reproduction

A female lion normally gives birth every 18-26 months. After a gestation period of about 100 -119 days, she gives birth to one to six cubs. However, litter size is usually three or four cubs, and each weighs about 3 pounds. Young lions are weaned at 6-7 months after birth. Young cubs begin to participate in pride kills at 11 months, although they probably could not survive on their own until approximately 30 months of age. Lion infant mortality is very high, with fewer than 50% of newborn cubs surviving their first year of life. In the hierarchy of a lion pride, the males feed first, followed by the females and finally, the cubs. Since the pride may only kill an animal once every three to five days, it is clear why many cubs starve to death.

Interesting Facts

- Lions normally walk 2.4 miles per hour, but can run 29-35 miles per hour. They are also able to leap distances of up to 36 feet!
- A single lion needs approximately 10-20 large animals per year to sustain it!
- Most lion hunts fail. Of 62 lion stalks observed in one study, only 10 were successful!

Animals of Africa

Oryx

Oryx are in the order Artiodactyla, or even-toed ungulates (hoofed mammals). They belong to the family Bovidae, which includes antelope, cattle, goats and sheep. Kenya's Tana River divides the range of East Africa's two types of oryx the beisa oryx (*Oryx g. beisa*) and the fringe-eared oryx (*Oryx g. callotis*). The fringe-eared oryx ranges from Kenya to central Tanzania. The beisa oryx ranges from Ethiopia through Somalia into northeastern Uganda and Kenya.

Physical Characteristics

The oryx is a large antelope of striking appearance with long, spearlike horns. It has a thick, horselike neck with a short mane and a compact, muscular body. A defined pattern of black markings that contrast with the white face and fawn-colored body are prominently displayed in dominance rituals to emphasize the length of horns and strength of the shoulder.

The head is marked with black triangular patches and broad black stripes that extend from the base of the horns over the eyes to the cheeks. A ring of black encircles the throat and runs down the neck to the chest. The ears end in a black tip (a black tassel hangs from the ear tip of the fringe-eared oryx). A narrow black stripe runs along the spine, and another one separates the lower flank from the white under parts of the body. The white forelegs have a black ring above the knee and a black patch below. The black tail tassel reaches to the hocks.

The oryx's ringed horns are up to 30 inches long, making them formidable weapons. The female's horns are often longer and thinner than the male's.

Adult male body length is 60-67 inches and shoulder height is 45-55 inches. Adult females are smaller in stature. An adult male weighs 368-461 pounds, while the adult female is 256-414 pounds. Their tail length is up to 18.5 inches.

Habitat

Originally, various oryx species were found in all of Africa's arid regions. One species that occurred on the Arabian Peninsula was exterminated recently but has now been reintroduced into the wild from captive stock. Well adapted to the conditions of their hot, arid habitats.

Life Span

Oryx can live as long as 18 years in the wild to 22 years in captivity.

Behavior

The social system of the oryx is unusual in that nonterritorial males live in mixed groups with females, or with females and their young. Males that dominate are territorial to a degree, marking their areas with dung deposits. Groups are composed of 10 to 40 males and females of all ages and both sexes; herds of up to 200 are common in some East African habitats.



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The dominance hierarchy among oryx is based on age and size. As they grow, calves test one another in what look like games, though in reality are tests of strength. As the hierarchy becomes established, the need to fight is reduced. Ritual displays replace actual contact, except when evenly matched individuals may have to fight to establish their rank. Along with lateral displays, oryx perform a slow, prancing walk and sometimes break into a gallop. When several males are making these displays, they may clash horns.

Herd composition in the wild constantly changes according to need. Oryx wanting to drink, for example, form a group to go to water, or females with young form a group that moves more slowly. The result is a social system that allows for individual needs but retains the advantage of group living. Oryx range widely over a large area, but their keen sense of smell alerts them to rain in the area, so that groups quickly assemble, often in herds of 200 or more, to feed on new growth.

Herds have a dominant cow leading in the front, while the alpha bull follows behind the herd. He directs the herd mostly from the rear, but runs to the front to make necessary corrections. Males establish and maintain their hierarchy by "fencing" contests or occasional sparring matches, with dominance based on size and age. Oryx are mobile, moderately fast, and have great stamina when traveling long distances to find food. They are arid-adapted grazers, moving towards fresh plant growth, and are seemingly able to detect when rain has fallen many miles away. Oryx prefer to move and eat mostly in the early morning or in the evening. They usually rest during the day, ruminating and trying to stay cool in the shade of a tree, or in excavated shallow depressions in the soil.

Diet

Oryx typically feed in early morning and late afternoon and sometimes on moonlit nights. Their diets consists mainly of coarse grasses and browse from thorny shrubs. In desert areas they consume thick leaved plants, wild melons, as well as roots and tubers they dig out of the ground. They may drink if water is available but can survive days or even weeks without it.

Plants growing in arid areas inhabited by oryx have also adapted to the hot, dry conditions and either store water or have mechanisms to prevent excess loss. Plants collect dew, gradually releasing it during the hotter parts of the day. Some plants increase their water content by 25 to 40 percent, so when oryx feed late at night or early in the morning, it provides them with both food and water.

Reproduction

Female oryx reach sexual maturity at 1.5-2 years of age; males take up to five years. The gestation period lasts eight to nine months. She usually gives birth to just one calf, but twins are not uncommon. At birth, calves weigh 20-33 pounds. A female leaves the herd to give birth and hides the calf for 2 or 3 weeks, visiting a few times a day to nurse it. The newborn is an inconspicuous brown color. The black markings begin to appear when the calf is ready to return to herd with its mother. Calves are suckled for 6 to 9 months and reach maturity at 18 to 24 months. Most young males migrate out of their natal group to join other groups.

Predators

Like other antelope species, oryx primarily depend on flight to escape from predators such as lions, wild dogs and hyenas.

Interesting Facts

- The oryx is a good example of an antelope that has successfully adapted to the harsh conditions of dispersed food, intense heat and little or no water.
- The female comes into heat soon after giving birth. The more frequent estrus cycles enable females to produce calves at 9-month intervals.
- Some people suspect the legend of the unicorn originated with the oryx!
- Oryx are the only antelope born with horns, which are visible at birth as hair-covered bumps!
- In Greek "callotis" translates to "beautiful ears." This likely refers to the distinctive tufts of long black hairs on the ears of the fringe-eared oryx!

Animals of Africa

Rhinoceros

The rhinoceros is a large, primitive-looking mammal that in fact dates from the Miocene era millions of years ago. In recent decades rhinos have been relentlessly hunted to the point of near extinction. Since 1970 the world rhino population has declined by 90 percent, with five species remaining in the world today, all of which are endangered.

White Rhinoceros

The White Rhinoceros is a herbivorous grazer that belongs to the order of the Perissodactyla and is the second most massive remaining land animal in the world. It's one of the two species of Rhinos native to Africa. It's current range is primarily Southern Africa. There are about 14,500 White Rhino still left in the wild, and their survival today portrays one of conservation's success stories as their numbers were less than 100 in 1895. In recent years the Northern White Rhino subspecies has been pushed to the brink of extinction due to poaching in Northern Congo and the inaccessibility for conservation organizations due to the civil war. It is now believed that only 10 Northern White Rhinos remain in Garamba National park, but efforts are still being made to save this subspecies.



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Black Rhinoceros

The Black Rhinoceros is a herbivorous browser that belongs to the order of the Perissodactyla. It's one of the two species of Rhinos native to Africa and it's current range includes Southern and Eastern areas of Africa. There are about 3,610 Black Rhino still left in the wild, but it has been estimated that there were about 70,000 in the late 1960s. The Black Rhino has seen the most drastic decline of all rhino species, because of poaching and habitat loss. But due to conservation efforts numbers are stabilizing and slowly rising, although tremendous effort is still needed to secure the future for the Black Rhino. There are four subspecies of Black Rhino, but the West African Black Rhino (*Diceros bicornis longipes*) is tentatively declared extinct.

Physical Characteristics

The rhinoceros stands about 60 inches at the shoulder. Both the black and white rhino have two horns, the longer of which sits at the front of the nose.

White Rhino

White Rhino weighs about 2 tons.

The white rhino's name derives from the Dutch "weit," meaning wide, a reference to its wide, square muzzle adapted for grazing. The white rhino, which is actually gray, has a pronounced hump on the neck and a long face.

Black Rhino

Black Rhino weighs about 1 to 1½ tons.

The black, or hooked-lipped, rhino, along with all other rhino species, is an odd-toed ungulate (three toes on each foot). It has a thick, hairless, gray hide.

Habitat

White Rhino

White rhinos live in savannas with water holes, mud wallows and shade trees.

Black Rhino

Black rhinos have various habitats, but mainly areas with dense, woody vegetation.

Life Span

35 to 40 years

Behavior

Rhinos live in home ranges that sometimes overlap with each other. Feeding grounds, water holes and wallows may be shared. The black rhino is usually solitary. The white rhino tends to be much more gregarious. Rhinos are also rather ill-tempered and have become more so in areas where they have been constantly disturbed. While their eyesight is poor, which is probably why they will sometimes charge without apparent reason, their sense of smell and hearing are very good.

They have an extended "vocabulary" of growls, grunts, squeaks, snorts and bellows. When attacking, the rhino lowers its head, snorts, breaks into a gallop reaching speeds of 30 miles an hour, and gores or strikes powerful blows with its horns. Still, for all its bulk, the rhino is very agile and can quickly turn in a small space. The rhino has a symbiotic relationship with oxpeckers, also called tick birds. In Swahili the tick bird is named "askari wa kifaru," meaning "the rhino's guard." The bird eats ticks it finds on the rhino and noisily warns of danger. Although the birds also eat blood from sores on the rhino's skin and thus obstruct healing, they are still tolerated.

The closest rhino relationship is between a female and her calf, lasting from 2 to 4 years. As the older calves mature, they leave their mothers and may join other females and their young, where they are tolerated for some time before living completely on their own.

Diet

Rhinos generally eat leafy material, although their ability to ferment food in their hindgut allows them to subsist on more fibrous plant matter, if necessary. Unlike other perissodactyls, the African species of rhinoceros lack teeth at the front of their mouths, relying instead on their powerful premolar and molar teeth to grind up plant food.

White Rhino

The white rhino is a grazer feeding on grasses.

Black Rhino

The black rhino is a browser, with a triangular-shaped upper lip ending in a mobile grasping point. It eats a large variety of vegetation, including leaves, buds and shoots of plants, bushes and trees.

Reproduction

Young are born after a gestation period of 16 months.

Predators

Rhinoceros are killed by humans for their valuable horns, which are made of keratin, the same type of protein that makes up hair and fingernails. In the wild, adult rhinoceros have few natural predators other than humans. Young rhinos can fall prey to predators such as big cats, crocodiles, wild dogs, and hyena. Although rhinos are of large size and have a reputation of being tough, they are actually very easily poached. A creature of habit that lives in a well-defined home range, it usually goes to water holes daily, where it is easily ambushed. The dramatic decline in rhino is unfortunate in an era of increasing conservation but efforts are underway to save the rhino from extinction.

Animals of Africa

Zebra

Zebras, horses and wild asses are all equids, long-lived animals that move quickly for their large size and have teeth built for grinding and cropping grass. Zebras have horse like bodies, but their manes are made of short, erect hair, their tails are tufted at the tip and their coats are striped.

Three species of zebra still occur in Africa, two of which are found in East Africa. The most numerous and widespread species in the east is Burchell's, also known as the common or plains zebra. The other is Grevy's zebra, named for Jules Grevy, a president of France in the 1880s who received one from Abyssinia as a gift, and now found mostly in northern Kenya. (The third species, *Equus zebra*, is the mountain zebra, found in southern and southwestern Africa.)



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Physical Characteristics

The long-legged Grevy's zebra, the biggest of the wild equids, is taller and heavier than the Burchell's, with a massive head and large ears.

Zebras have shiny coats that dissipate over 70 percent of incoming heat, and some scientists believe the stripes help the animals withstand intense solar radiation. The black and white stripes are a form of camouflage called disruptive coloration that breaks up the outline of the body. Although the pattern is visible during daytime, at dawn or in the evening when their predators are most active, zebras look indistinct and may confuse predators by distorting true distance.

The stripes on Grevy's zebras are more numerous and narrow than those of the plains zebra and do not extend to the belly. In all zebra species, the stripes on the forequarters form a triangular pattern; Grevy's have a similar pattern on the hindquarters, while others have a slanted or horizontal pattern.

Habitat

Burchell's zebras inhabit savannas, from treeless grasslands to open woodlands; they sometimes occur in tens of thousands in migratory herds on the Serengeti plains. Grevy's zebras are now mainly restricted to parts of northern Kenya. Although they are adapted to semi-arid conditions and require less water than other zebra species, these zebras compete with domestic livestock for water and have suffered heavy poaching for their meat and skins.

Behavior

Family groups are stable members maintaining strong bonds over many years. Mutual grooming, where zebras stand together and nibble the hair on each other's neck and back, helps develop and preserve these bonds. Family members look out for one another if one becomes separated from the rest, the others search for it. The group adjusts its traveling pace to accommodate the old and the weak.

The females within a family observe a strict hierarchical system. A dominant mare always leads the group, while others follow her in single file, each with their foals directly behind them. The lowest-ranking mare is the last in line. Although the stallion is the dominant member of the family, he operates outside the system and has no special place in the line.

Diet

Zebras are avid grazers. Both Burchell's and Grevy's zebras are in constant search of green pastures. In the dry season, they can live on coarse, dry grass only if they are within a short distance (usually no farther than 20 miles away) of water holes.

Reproduction

When a foal is born the mother keeps all other zebras (even the members of her family) away from it for 2 or 3 days, until it learns to recognize her by sight, voice and smell.

While all foals have a close association with their mothers, the male foals are also close to their fathers. They leave their group on their own accord between the ages of 1 and 4 years to join an all-male bachelor group until they are strong enough to head a family.

Predators

Zebras are important prey for lions and hyenas, and to a lesser extent for hunting dogs, leopards and cheetahs. When a family group is attacked, the members form a semicircle, face the predator and watch it, ready to bite or strike should the attack continue. If one of the family is injured the rest will often encircle it to protect it from further attack.

Related Heartlands

- Samburu Heartland

Interesting Facts

- Romans called Grevy's zebras 'hippotigris' and trained them to pull two-wheeled carts for exhibition in circuses.
- At first glance zebras in a herd might all look alike, but their stripe patterns are as distinctive as fingerprints are in man. Scientists can identify individual zebras by comparing patterns, stripe widths, color and scars.