



Reticulated Giraffe

ARTIODACTYLA

Family: Giraffidae

Genus: *Giraffa*

**Species: *camelopardalia
reticulata***



Range: Non-continuous distribution in parts of Sub-Saharan Africa; *G.c.reticulata* found in Kenya

Habitat: Savannas, with scattered trees and lightly wooded areas

Niche: active day and night, terrestrial, herbivorous browser

Wild diet: leaves and young shoots especially of *Acacia*. Also eat seeds and pods.

Zoo diet: acacia, alfalfa, vegetables and giraffe chow

Life Span: (Wild) 15-20 up to 26 yrs; (Captive) record is 36 yrs

Sexual dimorphism: M taller and heavier than F; M skull has extensive ossification on top

Location in SF Zoo: African Savanna

APPEARANCE & PHYSICAL ADAPTATIONS:

Giraffes are the tallest animal and largest ruminant with a long neck, long legs and large hooved feet. They have a short, stiff mane and long tuft of hair on end of tail and walk with both legs on one side moving at the same time in order to avoid tangling their legs. They can reach up to 34 mph and travel long distances without tiring. Both sexes have two horn-like structures (ossicones) on top of head, which are cartilaginous at birth. Pelage is medium to reddish brown and broken into splotches by buff colored borders. Nostrils can be closed to protect against sandstorms and ants. Large brown eyes are protected by long black lashes. Lips and tongue are prehensile; tongue is 18 inches with a purplish-black color. Saliva is thick and the lips, tongue, and inside of the mouth are covered in papillae to protect against thorns.

Giraffe have seven cervical vertebrae (like most mammals), which are elongated with ball and socket joints, giving them more mobility; a modified atlas-axis joint (top two cervical vertebrae) allows the animal to tilt its head vertically and reach more branches with its tongue. A giraffe's height requires specializations that regulate blood flow to the head, especially when drinking; a large (25lbs) heart works against gravity to pump blood to brain; they have unusually elastic blood vessels with a series of valves that help offset the sudden buildup of blood (and to prevent fainting) when its head is raised, lowered, or swung quickly. Lower legs have a very tight sheath of thick skin to prevent blood from pooling. Giraffes splay their forelegs and/or bent knees to enable their long neck to reach down to the water; leaving them vulnerable to prey. Giraffes drink water when it is available, and they are able to survive in areas with scarce water. They have no upper incisors or canines and premolars and molars have low crowns that allow these animals to browse on leaves.

Wt:	M 1760 - 4180 lbs
	F 1210 - 2596 lbs
HRL:	12.1 - 15 ft
H:	M 14.4 - 18.5 ft
	F 12.5 - 14.4 ft
TL:	2.6 - 3.3 ft

STATUS & CONSERVATION

Currently, the IUCN Red List recognizes one species with nine subspecies of giraffe, listing them as Vulnerable; *G. c. peralta* and *G. c. rothschildi* are listed as Endangered. A new DNA study suggests four giraffe species; all four giraffe species and their subspecies live in geographically distinct areas throughout Africa. Pressures including habitat loss and fragmentation, civil unrest and illegal hunting. As their habitat shrinks, their main food source, the acacia trees are disappearing also. Numbers are decreasing highlighting the need for greater conservation efforts; they are already extinct in seven countries.

COMMUNICATION AND OTHER BEHAVIOR

Sounds rarely heard, consist of grunts or snorts when alarmed or whistles used by females to call calves that bleat in response. With their well-developed eyesight and high vantage point, giraffes are able to stay in communication even if physically very far apart. Giraffes sleep only about 2 hours in a period of 24 hours. They achieve this in quick naps that may last only a minute or two at a time. Giraffes rest while standing, but they sometimes lie down with their head resting on their rump, usually while one herd member stands guard.

Adult giraffes do not have strong social bonds, though they do gather in loose aggregations if they happen to be moving in the same general direction. Female giraffes are more social and usually found in groups; the composition of these groups tends to be open and changing. Adult males become more solitary. Giraffes are not territorial but have home ranges. The reason for this harmony is the dominance hierarchy among males in local populations. "Necking" is used to establish dominance and males that win necking bouts have greater reproductive success; necking is swinging their necks from side to side and striking with their heads. A reinforced skull usually absorbs the impact of these blows. Dominance is usually established early in life and once dominance has been established, the two often coexists peacefully. Cows also have a dominance hierarchy, although its manifestation is subtle, usually being confined to the displacement of subordinate females at attractive feeding sites.

COURTSHIP AND YOUNG

Only dominant males are generally able to mate; the dominant male will often guard the estrus female against other males. Early in courtship, subordinate bulls may consort with a receptive female. Breeding occurs throughout the year. Females tend to return to the same calving area for successive births; calves are born in isolation. Female gives birth standing up, and newborns drop to the ground. Immediately after birth, the cow moves her calf a short distance to an area of safety. Here the calf is completely isolated from all other giraffes for a period, which may last as long as a month. This time period may be essential for imprinting of the calf on the mother. After this time, calves may begin group together in crèches, sometimes with mothers standing watch.

Estrous: 15 days; Polyestrous 20-22 months between births

Gestation: 425-465 days

of Mammae: 1 pair

of Young: 1 rarely twins

Sexual Maturity: M – 7-8 yrs / F 4 - .5 yrs

Weaning Age: 13 - 15 mo.

Weight at birth: 103.5 - 154 lbs

Height at birth: 5.6 - 6.6 ft

MISCELLANEOUS

Camelopardalis = camel (*camelus*), leopard (*pardus*); Latin. It was originally thought that giraffes were part camel and part leopard. Nine subspecies have been described based on type of spotting pattern, color, and geographic origin; "reticulated" refers to the net-like pattern. Individuals can be recognized by their unique markings.

Sources:

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http://animaldiversity.ummz.umich.edu/site/accounts/information/Tragelaphus_strepsiceros.html

http://www.giraffeconservation.org/giraffe_facts.php?pgid=1

<http://library.sandiegozoo.org/factsheets/giraffe/giraffe.htm>

<http://animals.nationalgeographic.com/animals/mammals/giraffe/>