

ZEBRAS







zebra - зебра

[ˈzi:brə]



imperial zebra - зебра
Греви

[ɪmˈpɪəriəl ˈzi:brə]



plains zebra -
равнинная зебра

[pleɪnz ˈzi:brə]



**Grant's zebra - зебра
Гранта**

[gra:nt'es 'zi:brə]



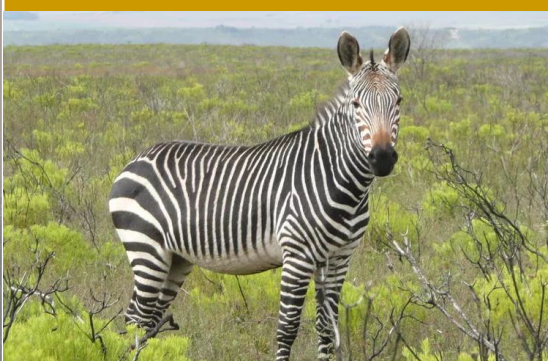
**Chapman's zebra -
зебра Чепмена**

['tʃæpmən'es 'zi:brə]



**Burchell's zebra - зебра
Берчелла**

[burchell'es 'zi:brə]



**mountain zebra -
горная зебра**

['maʊntɪn 'zi:brə]



**cape mountain zebra -
горная капская зебра**

[keɪp 'maʊntɪn 'zi:brə]

Zebra



Zebras are African equines with distinctive black-and-white striped coats. There are three extant species: the **Grévy's zebra**, **plains zebra**, and the **mountain zebra**. Zebras share the genus *Equus* with horses and asses, the three groups being the only living members of the family *Equidae*. Zebra stripes come in different patterns, unique to each individual. Several theories have been proposed for the function of these stripes, with most evidence supporting them as a form of protection from biting flies. Zebras inhabit eastern and southern Africa and can be found in a variety of habitats such as savannahs, grasslands, woodlands, shrublands, and mountainous areas.

Zebras are primarily grazers and can subsist on lower-quality vegetation. They are preyed on mainly by lions and typically flee when threatened but also bite and kick. Zebra species differ in social behaviour, with plains and mountain zebra living in stable harems consisting of an adult male or stallion, several adult females or mares, and their young or foals; while Grévy's zebra live alone or in loosely associated herds. In harem-holding species, adult females mate only with their harem stallion, while male Grévy's zebras establish territories which attract females and the species is promiscuous. Zebras communicate with various vocalisations, body postures and facial expressions. Social grooming strengthens social bonds in plains and mountain zebras.

Zebras' dazzling stripes make them among the most recognisable mammals. They have been featured in art and stories in Africa and beyond. Historically, they have been highly sought after by exotic animal collectors, but unlike horses and donkeys, zebras have never been truly domesticated. The International Union for Conservation of Nature (IUCN) lists the Grévy's zebra as endangered, the mountain zebra as vulnerable and the plains zebra as near-threatened. The quagga, a type of plains zebra, was driven to extinction in the 19th century. Nevertheless, zebras can be found in numerous protected areas.

As with all wild equines, zebras have barrel-chested bodies with tufted tails, elongated faces and long necks with long, erect manes. Their elongated, slender legs end in a single spade-shaped toe covered in a hard hoof. Their dentition is adapted for grazing; they have large incisors that clip grass blades and highly crowned, ridged molars well suited for grinding. Males have spade-shaped canines, which can be used as weapons in fighting. The eyes of zebras are at the sides and far up the head, which allows them to see above the tall grass while grazing. Their moderately long, erect ears are movable and can locate the source of a sound.

Unlike horses, zebras and asses have chestnut callosities only on their front limbs. In contrast to other living equines, zebra forelimbs are longer than their back limbs. Diagnostic traits of the zebra skull include: its relatively small size with a straight profile, more projected eye sockets, narrower rostrum, reduced postorbital bar, a V-shaped groove separating the metaconid and metastylid of the teeth and both halves of the enamel wall being rounded.

Zebra species have two basic social structures. Plains and mountain zebras live in stable, closed family groups or harems consisting of one stallion, several mares, and their offspring. These groups have their own home ranges, which overlap, and they tend to be nomadic. Stallions form and expand their harems by recruiting young mares from their natal (birth) harems. The stability of the group remains even when the family stallion dies or is displaced. Plains zebra groups also live in a fission-fusion society. They gather into large herds and may create temporarily stable subgroups within a herd, allowing individuals to interact with those outside their group. Among harem-holding species, this behaviour has otherwise only been observed in primates such as the gelada and the hamadryas baboon.

Females of these species benefit as males give them more time for feeding, protection for their young, and protection from predators and harassment by outside males. Among females in a harem, a linear dominance hierarchy exists based on the time at which they join the group. Harems travel in a consistent filing order with the high-ranking mares and their offspring leading the groups followed by the next-highest ranking mare and her offspring, and so on. The family stallion takes up the rear. Young of both sexes leave their natal groups as they mature; females are usually herded by outside males to be included as permanent members of their harems.

In the more arid-living Grévy's zebras, adults have more fluid associations and adult males establish large territories, marked by dung piles, and monopolise the females that enter them. This species lives in habitats with sparser resources and standing water and grazing areas may be separated. Groups of lactating females are able to remain in groups with nonlactating ones and usually gather at foraging areas. The most dominant males establish territories near watering holes, where more sexually receptive females gather. Subdominants have territories farther away, near foraging areas. Mares may wander through several territories but remain in one when they have young. Staying in a territory offers a female protection from harassment by outside males, as well as access to a renewable resource.

In all species, excess males gather in bachelor groups. These are typically young males that are not yet ready to establish a harem or territory. With the plains zebra, the males in a bachelor group have strong bonds and have a linear dominance hierarchy. Bachelor groups tend to be at the periphery of herds and when the herd moves, the bachelors trail behind. Mountain zebra bachelor groups may also include young females that have recently left their natal group, as well as old males they have lost their harems. A territorial Grévy's zebra stallion may tolerate non-territorial bachelors who wander in their territory, however when a mare in oestrous is present the territorial stallion keeps other stallions at bay. Bachelors prepare for their adult roles with play fights and greeting/challenge rituals, which make up most of their activities.

Fights between males usually occur over mates and involve biting and kicking. In plains zebra, stallions fight each other over recently matured mares to bring into their group and her family stallion will fight off other males trying to abduct her. As long as a harem stallion is healthy, he is not usually challenged. Only unhealthy stallions have their harems taken over, and even then, the new stallion gradually takes over, pushing the old one out without a fight. Agonistic behaviour between male Grévy's zebras occurs at the border of their territories.

When meeting for the first time, or after they have separated, individuals may greet each other by rubbing and sniffing their noses followed by rubbing their cheeks, moving their noses along their bodies and sniffing each other's genitals. They then may rub and press their shoulders against each other and rest their heads on one another. This greeting is usually performed among harem or territorial males or among bachelor males playing. Plains and mountain zebras strengthen their social bonds with grooming. Members of a harem nip and scrape along the neck, shoulder, and back with their teeth and lips. Grooming usually occurs between mothers and foals and between stallions and mares. Grooming shows social status and eases aggressive behaviour. Although Grévy's zebras do not perform social grooming, they do sometimes rub against another individual.

Zebras produce a number of vocalisations and noises. The plains zebra has a distinctive, high-pitched contact call (commonly called "barking") heard as "a-ha, a-ha, a-ha" or "kwa-ha, kaw-ha, ha, ha". The call of the Grévy's zebra has been described as "something like a hippo's grunt combined with a donkey's wheeze", while the mountain zebra is relatively silent. Loud snorting in zebras is associated with alarm. Squealing is usually made when in pain, but bachelors also squeal while play fighting. Zebras also communicate with visual displays, and the flexibility of their lips allows them to make complex facial expressions. Visual displays also incorporate the positions of the head, ears, and tail. A zebra may signal an intention to kick by laying back its ears and sometimes lashing the tail. Flattened ears, bared teeth, and abrupt movement of the heads may be used as threatening gestures, particularly among stallions.

Imperial zebra



The **Grévy's zebra**, also known as the **imperial zebra**, is the largest living wild equid and the most threatened of the three species of zebra, the other two being the plains zebra and the mountain zebra. Named after Jules Grévy, it is found in Kenya and Ethiopia. Compared with other zebras, it is tall, has large ears, and its stripes are narrower.

The Grévy's zebra lives in semi-arid grasslands where it feeds on grasses, legumes, and browse; it can survive up to five days without water. It differs from the other zebra species in that it does not live in harems and has few long-lasting social bonds. Stallion territoriality and mother-foal relationships form the basis of the social system of the Grévy's zebra. This zebra is considered to be endangered. Its population has declined from 15,000 to 2,000 since the 1970s. In 2016 the population was reported to be stable.

The Grévy's zebra is the largest of all wild equines. It is 2.5–2.75 m in head-body with a 55–75 cm tail, and stands 1.45–1.6 m high at the withers. These zebras weigh 350–450 kg. Grévy's zebra differs from the other two zebras in its more primitive characteristics. It is particularly mule-like in appearance; the head is large, long, and narrow with elongated nostril openings; the ears are very large, rounded, and conical and the neck is short but thick. The zebra's muzzle is ash-grey to black in colour with the lips having whiskers. The mane is tall and erect; juveniles have a mane that extends to the length of the back and shortens as they reach adulthood.

As with all zebra species, the Grevy's zebra's pelage has a black and white striping pattern. The stripes are narrow and close-set, being broader on the neck, and they extend to the hooves. The belly and the area around the base of the tail lack stripes and are just white in color, which is unique to the Grevy's zebra. Due to the stripes being closer together and thinner than most of the other zebras, it is easier for them to make a good escape and to hide from predators. Foals are born with brown and white striping, with the brown stripes darkening as they grow older. Embryological evidence has shown that the zebra's background colour is dark and the white is an addition. The stripes of the zebra may serve to make it look bigger than it actually is or disrupt its outline. It appears that a stationary zebra can be inconspicuous at night or in shade. Experiments have suggested that the stripes polarize light in such a way that it discourages biting horse-flies in a manner not shown with other coat patterns. Other studies suggest that, when moving, the stripes may confuse observers, such as mammalian predators and biting insects, via two visual illusions, the wagon wheel effect, where the perceived motion is inverted, and the barber pole illusion, where the perceived motion is in a wrong direction.

Plains zebra



The **plains zebra**, also known as the **common zebra**, is the most common and geographically widespread species of zebra. Its range is fragmented, but spans much of southern and eastern Africa south of the Sahara. Six or seven subspecies have been recognised, including the extinct quagga which was thought to be a separate species. More recent research supports variations in zebra populations being clines rather than subspecies.

The plains zebra is intermediate in size between the larger Grévy's zebra and the smaller mountain zebra and tends to have broader stripes than both. Great variation in coat patterns exists between clines and individuals. The plain zebra's habitat is generally, but not exclusively, treeless grasslands and savanna woodlands, both tropical and temperate. They generally avoid desert, dense rainforest and permanent wetlands. Zebras are preyed upon by lions and spotted hyenas, Nile crocodiles and, to a lesser extent, cheetahs and African wild dogs.

The plains zebra is a highly social species, forming harems with a single stallion, several mares and their recent offspring; bachelor groups also form. Groups may come together to form herds. The animals keep watch for predators; they bark or snort when they see a predator and the harem stallion attacks predators to defend his harem.

The plains zebra stands at a height of 127-140 cm with a head-body length of 217-246 cm and a tail length of 47-56.5 cm. Males weigh 220-322 kg while females weigh 175-250 kg. The species is intermediate in size between the larger Grévy's zebra and the smaller mountain zebra. It is dumpy bodied with relatively short legs and a skull with a convex forehead and a somewhat concave nose profile. The neck is thicker in males than in females. The ears are upright and have rounded tips. They are shorter than in the mountain zebra and narrower than in Grévy's zebra. As with all wild equids, the plains zebra has an erect mane along the neck and a tuft of hair at the end of the tail. The body hair of a zebra is 9.4 ± 4 mm, shorter than in other African ungulates.

Grant's zebra



Grant's zebra is the smallest of the seven subspecies of the plains zebra. This subspecies represents the zebra form of the Serengeti-Mara ecosystem.

The distribution of this subspecies is in Zambia west of the Luangwa river and west to Kariba, Katanga Province of the Democratic Republic of the Congo, north to the Kibanzao Plateau, and in Tanzania north from Nyangau and Kibwezi into southwestern Kenya as far as Sotik. It can also be found in eastern Kenya and east of the Great Rift Valley into southernmost Ethiopia. It also occurs as far as the Juba River in Somalia.

This northern subspecies is vertically striped in front, horizontally on the back legs, and diagonally on the rump and hind flanks. Shadow stripes are absent or only poorly expressed. The stripes, as well as the inner spaces, are broad and well defined. Northerly specimens may lack a mane. Grant's zebras grow to be about 120 to 140 cm tall, and generally weigh about 300 kg. The zebras live in family groups of up to 18 zebras, and they are led by a single stallion. Grant's zebras typically live 20 years.

Zambia is an ideal place for zebras. These animals prefer living in savanna woodlands and grasslands; they are not found in deserts, wetlands, or rainforests. The mountain variety lives in rocky mountainous areas. Unfortunately, the availability of habitat for all species of zebras is shrinking, resulting in population decline.

Zebras are exclusively herbivorous, meaning that they only eat plants. Their diet is almost entirely made up of grasses, but they also eat leaves, bark, shrubs, and more.

Like all members of the horse family, zebras spend more time feeding than ruminant herbivores, such as antelope and wildebeest do. This is because horses, including zebras, do not chew the cud. Instead the cellulose in their food is broken down in their caecum. This is not as efficient as the method used by ruminants but is more effective at breaking down coarse vegetation. Hence although zebras must feed for longer each day than antelope and wildebeest do, they can consume grasses and other plants with higher fibre content or lower protein levels than ruminants can digest.

Grant's Zebras, like many other zebras, are highly social creatures, and different species have different social structures. In some species, one stallion guards a harem of females, while other species remain in groups, but do not form strong social bonds. They can frequently change herd structure, and will change companions every few months.

Chapman's zebra



Chapman's zebra, named after its discoverer James Chapman, is a subspecies of the plains zebra.

They, like their relatives, are native to the savannah of north-east South Africa, north to Zimbabwe, west into Botswana, the Caprivi Strip in Namibia, and southern Angola. Like the other subspecies of plains zebra, it is a herbivore that exists largely on a diet of grasses, and undertakes a migration during the wet season to find fresh sources of food and to avoid lions, which are their primary predator. Chapman's zebras are distinguished from other subspecies by subtle variations in their stripes. When compared to other equids in the region Chapman's zebras are relatively abundant in number, however its population is now in decline largely because of human factors such as poaching and farming. Studies and breeding programs have been undertaken with the hope of arresting this decline, with a focus on ensuring zebras bred in captivity are equipped for life in the wild, and that non-domesticated populations are able to freely migrate. A problem faced by some of these programs is that captive Chapman's zebra populations experience higher incidences of diagnosed diseases than non-domesticated populations due to the fact that they live longer, and so are less likely to die in the wild from predation or a lack of food or water.

Chapman's zebras are single-hoofed mammals that are a part of the odd-toed ungulate order. They differ from other zebras in that their stripes continue past their knees, and that they also have somewhat brown stripes in addition to the black and white stripes that are typically associated with zebras. The pastern is also not completely black on the lower half. Each zebra has its own unique stripe pattern that also includes shadow stripes. When foals are born, they have brown stripes, and in some cases, adults do not develop the black colouration on their hides and keep their brown stripes.

In the wild Chapman's zebra live on average to 25 years of age, however that can live to be up to 38 years of age in captivity. Males usually weigh 270–360 kg and stand at 120–130 cm tall. Females weigh about 230–320 kg and stand as tall as the males. Foals weigh 25-50 kg at birth.

Chapman's zebras have been observed to spend a large portion of their day feeding and primarily consume low-quality grasses found in savannas, grasslands, and shrublands, however they occasionally eat wild berries and other plants in order to increase protein intake. While they show a preference for short grasses, unlike some other grazing animals they also eat long grasses and so play an important role by consuming the upper portion of long grass that has grown in the wet season to then allow for other animals to feed. Young foals are reliant on their mothers for sustenance for approximately the first 12 months of their lives as their teeth are unable to properly breakdown the tough grasses that the adults eat until the enamel has sufficiently worn away.

Burchell's zebra



Burchell's zebra is a southern subspecies of the plains zebra. It is named after the British explorer and naturalist William John Burchell. Common names include the bontequagga, Damaraland zebra, and Zululand zebra. Burchell's zebra is the only subspecies of zebra which may be legally farmed for human consumption.

Like most plains zebras, females and males are relatively the same size, standing 1.1 to 1.4 meters at the shoulder. They weigh between 500 to 700 pounds. Year-round reproduction observed in this subspecies in Etosha National Park, Namibia, concludes synchronization of a time budget between males and females, possibly explaining the lack of sexual dimorphism.

Damara zebras are described as being striped on the head, the neck, and the flanks, and sparsely down the upper segments of the limbs then fading to white. One or two shadow stripes rest between the bold, broad stripes on the haunch. This main, distinguishing characteristic sets the Zululand Zebra apart from the other subspecies. Gray, observed a distinct dorsal line, the tail only bristly at the end, and the body distinctly white. The dorsal line is narrow and becomes gradually broader in the hinder part, distinctly margined with white on each side.

Like most plains zebras, Burchells live in small family groups. These can be either harem or bachelor groups, with harem groups consisting of one stallion and one to six mares and their most recent foals, and bachelor groups containing two to eight unattached stallions. The males in bachelor herds are often the younger or older stallions of the population, as they are most likely not experienced enough or strong enough to defend breeding rights to a group of females from challengers. These small groups often congregate together in larger herds around water and food sources, but still maintain their identity as family units while in the population gatherings.

Mountain zebra



The **mountain zebra** is a zebra species in the family Equidae. It is native to south-western Angola, Namibia, and South Africa.

The mountain zebra has a dewlap, which is more conspicuous in *E. z. zebra* than in *E. z. hartmannae*. Like all extant zebras, mountain zebras are boldly striped in black or dark brown, and no two individuals look exactly alike. The whole body is striped except for the belly. In the Cape mountain zebra, the ground colour is effectively white, but the ground colour in Hartmann's zebra is slightly buff.

Adult mountain zebras have a head-and-body length of 2.1 to 2.6 m and a tail of 40 to 55 cm long. Wither height ranges from 1.16 to 1.5 m. They weigh from 204 to 372 kg.

Groves and Bell found that Cape mountain zebras exhibit sexual dimorphism, females being larger than males, whereas Hartmann's mountain zebras do not. Hartmann's zebra is on average slightly larger than the Cape mountain zebra.

Mountain zebras are found on mountain slopes, open grasslands, woodlands, and areas with sufficient vegetation, but their preferred habitat is mountainous terrain, especially escarpment with a diversity of grass species.

Mountain zebras do not aggregate into large herds like plains zebras; they form small family groups consisting of a single stallion and one to five mares, together with their recent offspring. Bachelor males live in separate groups, and mature bachelors attempt to capture young mares to establish a harem. In this they are opposed by the dominant stallion of the group.

Mares give birth to one foal at a time, for about 3 years baby foals gets weaned onto solid forage. Cape mountain zebra foals generally move away from their maternal herds sometime between the ages of 13 and 37 months. However, with Hartmann's mountain zebra, mares try to expel their foals when they are aged around 14 to 16 months. Young males may wander alone for a while before joining a bachelor group, while females are either taken into another breeding herd or are joined by a bachelor male to form a new breeding herd.

Cape mountain zebra



The **Cape mountain zebra** is a subspecies of mountain zebra that occurs in certain mountainous regions of the Western and Eastern Cape provinces of South Africa.

It is the smallest of all existing zebra species and also the most geographically restricted. Although once nearly driven to extinction, the population has now been increased by several conservation methods, and is classified as Vulnerable by the IUCN.

Like all zebra species, the Cape mountain zebra has a characteristic black and white striping pattern on its pelage, unique to individuals. As with other mountain zebras, it is medium-sized, thinner with narrower hooves than the common plains zebra, and has a white belly like the Grévy's zebra.

The Cape mountain zebra differs slightly from the Hartmann's subspecies, being stockier and having longer ears and a larger dewlap. Adults have a shoulder height of 116 to 128 cm, making them the most lightly built subspecies of zebra. There is slight sexual dimorphism with mares having a mass of around 234 kg and stallions weighing around 250–260 kg.

Stripes of the Cape subspecies are narrower and therefore more numerous than the other two zebra species, although slightly wider than those of the Hartmann's subspecies. Stripes on the head are narrowest, followed by those on the body. Much broader, horizontal stripes are found in the hind area of Cape mountain zebra, lacking the "shadow stripes" seen in the plains zebra. Stripes on the hind legs are broader than those of the front legs, and striping continues all the way down to the hooves. However, the dark vertical stripes stop abruptly at the flanks, leaving the belly white.

Historically, the Cape mountain zebra occurred throughout the montane regions of the Cape Province of South Africa. Today they are confined to several mountain reserves and national parks: mainly the Mountain Zebra National Park, but also the Gamka Mountain Reserve and Karoo National Park, amongst many others. As its name implies, like all mountain zebras, the Cape mountain zebra is found on slopes and plateaus of mountainous regions, and can be found at up to 2000m above sea level in the summer, moving to lower elevations in the winter.

The Cape mountain zebra is a graminivore, meaning that its diet consists mainly of grasses. It is a highly selective feeder, showing a preference for greener leafy plants, particularly the South African red grass and the weeping lovegrass. In marginal habitat such as fynbos, mountain zebra have been found to also feed on young restio shoots, as well as underground bulbs. Low growing, very coarse, small stalky grasses, as well as dying leaf material are usually avoided. It has been seen that the Cape subspecies is a climax grazer, meaning it feeds at quite a high level off the ground. This means that increasing the abundance of low level grazers such as springbok will reduce grass height to a level lower than the zebra's biting height, which could have detrimental consequences to the population.

