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**Gorillas** are ground-dwelling, predominantly [herbivorous](/wiki/Herbivorous) [apes](/wiki/Ape) that inhabit the [forests](/wiki/Forest) of central [Africa](/wiki/Africa). The [eponymous](/wiki/Eponym) genus *Gorilla* is divided into two species: the [eastern gorillas](/wiki/Eastern_gorilla) and the [western gorillas](/wiki/Western_gorilla), and either four or five [subspecies](/wiki/Subspecies). They are the largest [living](/wiki/Extant_taxon) [primates](/wiki/Primate). The [DNA](/wiki/DNA) of gorillas is highly similar to [that of humans](/wiki/Human_evolutionary_genetics), from 95–99% depending on what is counted, and they are the next closest living relatives to [humans](/wiki/Human) after the [chimpanzees](/wiki/Chimpanzee) and [bonobos](/wiki/Bonobo).

Gorillas' natural habitats cover tropical or subtropical forests in [Africa](/wiki/Africa). Although their range covers a small percentage of Africa, gorillas cover a wide range of elevations. The [mountain gorilla](/wiki/Mountain_gorilla) inhabits the [Albertine Rift](/wiki/Albertine_Rift_montane_forests) montane [cloud forests](/wiki/Cloud_forest) of the [Virunga Volcanoes](/wiki/Virunga_Mountains), ranging in altitude from [Template:Convert](/wiki/Template:Convert). Lowland gorillas live in dense forests and lowland swamps and marshes as low as [sea level](/wiki/Sea_level), with [western lowland gorillas](/wiki/Western_lowland_gorilla) living in Central West African countries and [eastern lowland gorillas](/wiki/Eastern_lowland_gorilla) living in the [Democratic Republic of the Congo](/wiki/Democratic_Republic_of_the_Congo) near its border with [Rwanda](/wiki/Rwanda).[[1]](#cite_note-1)

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## Etymology[[edit](/index.php?title=(none)&action=edit&section=1)]

The word "gorilla" comes from the history of [Hanno the Navigator](/wiki/Hanno_the_Navigator), ([Template:Abbr](/wiki/Template:Abbr) 500 BC) a [Carthaginian](/wiki/Ancient_Carthage) explorer on an expedition on the west [African](/wiki/Africa) coast to the area that later became [Sierra Leone](/wiki/Sierra_Leone).[[2]](#cite_note-2) They encountered "a savage people, the greater part of whom were women, whose bodies were hairy, and who our interpreters called Gorillae."[[3]](#cite_note-3) The word was then later used as the species name, though it is unknown whether what these ancient [Carthaginians](/wiki/Carthaginians) encountered were truly gorillas, another species of ape or monkeys, or humans.<ref name=Groves2002/>

The American physician and missionary [Thomas Staughton Savage](/wiki/Thomas_S._Savage) and naturalist [Jeffries Wyman](/wiki/Jeffries_Wyman) first described the [western gorilla](/wiki/Western_gorilla) (they called it [*Troglodytes gorilla*](/wiki/Troglodytes_gorilla)) in 1847 from specimens obtained in [Liberia](/wiki/Liberia).[[4]](#cite_note-4) The name was derived [Template:Ety](/wiki/Template:Ety),[[5]](#cite_note-5) described by Hanno.

## Evolution and classification[[edit](/index.php?title=(none)&action=edit&section=2)]

The closest relatives of gorillas are chimpanzees and humans, all of the Homininae having diverged from a common ancestor about 7 million years ago.[[6]](#cite_note-6) Human gene sequences differ only 1.6% on average from the sequences of corresponding gorilla genes, but there is further difference in how many [copies](/wiki/Gene_copy_number) each gene has.[[7]](#cite_note-7) Until recently, gorillas were considered to be a single species, with three subspecies: the western lowland gorilla, the eastern lowland gorilla and the mountain gorilla.[[8]](#cite_note-8)[[9]](#cite_note-9) There is now agreement that there are two species, each with two subspecies. More recently, a third subspecies has been claimed to exist in one of the species. The separate species and subspecies developed from a single type of gorilla during the [Ice Age](/wiki/Ice_Age), when their forest habitats shrank and became isolated from each other.[[1]](#cite_note-1) [Primatologists](/wiki/Primatology) continue to explore the relationships between various gorilla populations.[[8]](#cite_note-8) The species and subspecies listed here are the ones upon which most scientists agree.[Template:Citation needed](/wiki/Template:Citation_needed)

|  |  |
| --- | --- |
| **scope=col| Taxonomy of genus *Gorilla*<ref name=MSW3/>** | **scope=col| Phylogeny of superfamily Hominoidea<ref name=Israfil\_et\_al>**[**Template:Cite journal**](/wiki/Template:Cite_journal)**</ref>**[**Template:Rp**](/wiki/Template:Rp) |
| * **Genus *Gorilla***   + [Western gorilla](/wiki/Western_gorilla) (*G. gorilla*)     - [Western lowland gorilla](/wiki/Western_lowland_gorilla) (*G. g. gorilla*)     - [Cross River gorilla](/wiki/Cross_River_gorilla) (*G. g. diehli*)   + [Eastern gorilla](/wiki/Eastern_gorilla) (*G. beringei*)     - [Mountain gorilla](/wiki/Mountain_gorilla) (*G. b. beringei*)     - [Eastern lowland gorilla](/wiki/Eastern_lowland_gorilla) (*G. b. graueri*) | [Template:Clade](/wiki/Template:Clade) |

The proposed third subspecies of *Gorilla beringei*, which has not yet received a [trinomen](/wiki/Trinomen), is the Bwindi population of the mountain gorilla, sometimes called the [Bwindi gorilla](/wiki/Bwindi_gorilla).

Some variations that distinguish the classifications of gorilla include varying density, size, hair colour, length, culture, and facial widths.[[1]](#cite_note-1) Now, over 100,000 western lowland gorillas are thought to exist in the wild, with 4,000 in zoos; eastern lowland gorillas have a population of 4,000 in the wild and 24 in zoos.[[1]](#cite_note-1) Mountain gorillas are the most severely endangered, with an estimated population of about 620 left in the wild and none in zoos.[[1]](#cite_note-1) Population genetics of the lowland gorillas suggest that the western and eastern lowland populations diverged ~261 thousand years ago.<ref name=McManus2014>McManus KF, Kelley JL, Song S, Veeramah K, Woerner AE, Stevison LS, Ryder OA; Great Ape Genome Project, Kidd JM, Wall JD, Bustamante CD, Hammer MF (2014) Inference of Gorilla demographic and selective history from whole genome sequence data. Mol Biol Evol pii: msu394</ref>

## Physical characteristics[[edit](/index.php?title=(none)&action=edit&section=3)]

[thumb|left|A skull of a gorilla](/wiki/File:Gorilla_Male_perspective_5.jpg) Gorillas move around by [knuckle-walking](/wiki/Knuckle-walking), although they sometimes walk bipedally for short distances while carrying food or in defensive situations.[[10]](#cite_note-10) Wild male gorillas weigh [Template:Convert](/wiki/Template:Convert) while adult females usually weigh half as much as adult males at [Template:Convert](/wiki/Template:Convert). Adult males are [Template:Convert](/wiki/Template:Convert) tall, with an arm span that stretches from [Template:Convert](/wiki/Template:Convert). Female gorillas are shorter, with smaller arm spans.[[11]](#cite_note-11) Adult male gorillas are known as silverbacks due to the characteristic silver hair on their backs reaching to the hips. Occasionally, a silverback of over [Template:Convert](/wiki/Template:Convert) and [Template:Convert](/wiki/Template:Convert) has been recorded in the wild. Obese gorillas in captivity can weigh as much as [Template:Convert](/wiki/Template:Convert).[[12]](#cite_note-12) Gorilla facial structure is described as [mandibular prognathism](/wiki/Mandibular_prognathism), that is, the [mandible](/wiki/Mandible) protrudes farther out than the [maxilla](/wiki/Maxilla). Adult males also have a prominent [sagittal crest](/wiki/Sagittal_crest).

The eastern gorilla is more darkly coloured than the western gorilla, with the mountain gorilla being the darkest of all. The mountain gorilla also has the thickest hair. The western lowland gorilla can be brown or grayish with a reddish forehead. In addition, gorillas that live in lowland forests are more slender and agile than the more bulky mountain gorillas. The eastern gorilla also has a longer face and broader chest than the western gorilla.[[13]](#cite_note-13) Studies have shown gorilla blood is not reactive to anti-A and anti-B [monoclonal antibodies](/wiki/Monoclonal_antibodies), which would, in humans, indicate [type O blood](/wiki/Type_O_blood). Due to novel sequences, though, it is different enough to not conform with the human [ABO blood group system](/wiki/ABO_blood_group_system), into which the other great apes fit.[[14]](#cite_note-14) Like humans, gorillas have individual finger prints.[[15]](#cite_note-15)[[16]](#cite_note-16)Their eye colour is dark brown, framed by a black ring around the iris.

[thumb|right|Young gorilla in tree](/wiki/File:Nshongi_Gorilla_Group-7,_by_Justin_Norton.jpg)

## Distribution and habitat[[edit](/index.php?title=(none)&action=edit&section=4)]

Gorillas have a patchy distribution. The range of the two species is separated by the [Congo River](/wiki/Congo_River) and its [tributaries](/wiki/Tributary). The western gorilla lives in west central Africa, while the eastern gorilla lives in east central Africa. Between the species, and even within the species, gorillas live in a variety of habitats and elevations. Gorilla habitat ranges from [montane forests](/wiki/Montane_forest) to swamps. Eastern gorillas inhabit montane and submontane forests between [Template:Convert](/wiki/Template:Convert) above sea level.[[17]](#cite_note-17) Mountain gorillas live in the montane forests at the higher ends of the elevation range, while eastern lowland gorillas live in submontane forests at the lower ends of the elevation range. In addition, eastern lowland gorillas live in montane bamboo forests, as well as lowland forests ranging from [Template:Convert](/wiki/Template:Convert) in elevation.[[18]](#cite_note-18) Western gorillas live in both lowland swamp forests and montane forests, and elevations ranging from sea level to [Template:Convert](/wiki/Template:Convert).[[17]](#cite_note-17) Western lowland gorillas live in swamp and lowland forests ranging up to [Template:Convert](/wiki/Template:Convert), and Cross River gorillas live in low-lying and submontane forests ranging from [Template:Convert](/wiki/Template:Convert).

### Nesting[[edit](/index.php?title=(none)&action=edit&section=5)]

[thumb|Gorilla night nest constructed in a tree.](/wiki/File:Gorilla_nest.jpg) Gorillas construct nests for daytime and night use. Nests tend to be simple aggregations of branches and leaves about [Template:Convert](/wiki/Template:Convert) in diameter and are constructed by individuals. Gorillas, unlike chimpanzees or orangutans, tend to sleep in nests on the ground. The young nest with their mothers, but construct nests after three years of age, initially close to those of their mothers.[[19]](#cite_note-19) Gorilla nests are distributed arbitrarily and use of tree species for site and construction appears to be opportunistic.[[20]](#cite_note-20) Nest-building by great apes is now considered to be not just [animal architecture](/wiki/Animal_architecture), but as an important instance of [tool use](/wiki/Tool_use).[[20]](#cite_note-20)

## Food and foraging[[edit](/index.php?title=(none)&action=edit&section=6)]

[thumb|left|Gorillas moving in habitat](/wiki/File:Gorillas-moving.jpg) [thumb|right|Gorilla foraging](/wiki/File:Gorilla_gorilla08.jpg) A gorilla's day is synchronized, divided between rest periods and travel or feeding periods. Diets differ between and within species. Mountain gorillas mostly eat foliage, such as leaves, stems, pith, and shoots, while fruit makes up a very small part of their diets.[[21]](#cite_note-21) Mountain gorilla food is widely distributed and neither individuals nor groups have to compete with one another. Their home ranges average 3–15 km2 (1.16–5.79 mi2), and their movements range around [Template:Convert](/wiki/Template:Convert) or less on an average day.[[21]](#cite_note-21) Despite eating a few species in each habitat, mountain gorillas have flexible diets and can live in a variety of habitats.[[21]](#cite_note-21) Eastern lowland gorillas have more diverse diets, which vary seasonally. Leaves and pith are commonly eaten, but fruits can make up as much as 25% of their diets. Since fruit is less available, lowland gorillas must travel farther each day, and their home ranges vary from 2.7–6.5 km2 (1.04 to 2.51 mi2), with day ranges [Template:Convert](/wiki/Template:Convert). Eastern lowland gorillas will also eat insects, preferably ants.[[22]](#cite_note-22) Western lowland gorillas depend on fruits more than the others and they are more dispersed across their range.[[23]](#cite_note-23) They travel even further than the other gorilla subspecies, at [Template:Convert](/wiki/Template:Convert) per day on average, and have larger home ranges of 7–14 km2 (2.70–5.41 mi2).[[23]](#cite_note-23) Western lowland gorillas have less access to terrestrial herbs, although they can access aquatic herbs in some areas. Termites and ants are also eaten.

Gorillas rarely drink water "because they consume succulent vegetation that is [Template:Sic](/wiki/Template:Sic) almost half water as well as morning dew",[[24]](#cite_note-24) although both mountain and lowland gorillas have been observed drinking.

One possible predator of gorillas is the [leopard](/wiki/Leopard). Gorilla remains have been found in leopard scat, but this may be the result of scavenging.[[25]](#cite_note-25) When the group is attacked by humans, leopards, or other gorillas, an individual silverback will protect the group, even at the cost of his own life.[[26]](#cite_note-26) George Schaller reported, "[a] silverback gorilla and a leopard were both found dead from mutually inflicted wounds".[[27]](#cite_note-27)

## Behaviour[[edit](/index.php?title=(none)&action=edit&section=7)]

### Social structure[[edit](/index.php?title=(none)&action=edit&section=8)]

[thumb|Essender Gorilla eating in a Zoo in](/wiki/File:Essender_Gorilla_(14779233740).jpg) [Germany](/wiki/Germany) Gorillas live in groups called troops. Troops tend to be made of one adult male or silverback, multiple adult females and their offspring.[[28]](#cite_note-28)[[29]](#cite_note-29)[[30]](#cite_note-30) However, multiple-male troops also exist.[[29]](#cite_note-29) A silverback is typically more than 12 years of age, and is named for the distinctive patch of silver hair on his back, which comes with maturity. Silverbacks also have large canine teeth that also come with maturity. Both males and females tend to emigrate from their natal groups. For mountain gorillas, females disperse from their natal troops more than males.[[28]](#cite_note-28)[[31]](#cite_note-31) Mountain gorillas and western lowland gorillas also commonly transfer to second new groups.[[28]](#cite_note-28) Mature males also tend to leave their groups and establish their own troops by attracting emigrating females. However, male mountain gorillas sometimes stay in their natal troops and become subordinate to the silverback. If the silverback dies, these males may be able to become dominant or mate with the females. This behaviour has not been observed in eastern lowland gorillas. In a single male group, when the silverback dies, the females and their offspring disperse and find a new troop.[[31]](#cite_note-31)[[32]](#cite_note-32) Without a silverback to protect them, the infants will likely fall victim to [infanticide](/wiki/Infanticide_(zoology)). Joining a new group is likely to be a tactic against this.[[31]](#cite_note-31)[[33]](#cite_note-33) However, while gorilla troops usually disband after the silverback dies, female eastern lowlands gorillas and their offspring have been recorded staying together until a new silverback transfers into the group. This likely serves as protection from leopards.[[32]](#cite_note-32)[thumb|left|Silverback gorilla](/wiki/File:Gorilla_gorilla11.jpg) The silverback is the center of the troop's attention, making all the decisions, mediating conflicts, determining the movements of the group, leading the others to feeding sites, and taking responsibility for the safety and well-being of the troop. Younger males subordinate to the silverback, known as blackbacks, may serve as backup protection. Blackbacks are aged between 8 and 12 years[[30]](#cite_note-30) and lack the silver back hair. The bond that a silverback has with his females forms the core of gorilla social life. Bonds between them are maintained by grooming and staying close together.[[34]](#cite_note-34) Females form strong relationships with males to gain mating opportunities and protection from predators and infanticidal outside males.[[35]](#cite_note-35) However, aggressive behaviours between males and females do occur, but rarely lead to serious injury. Relationships between females may vary. Maternally related females in a troop tend to be friendly towards each other and associate closely. Otherwise, females have few friendly encounters and commonly act aggressively towards each other.[[28]](#cite_note-28) Females may fight for social access to males and a male may intervene.[[34]](#cite_note-34) Male gorillas have weak social bonds, particularly in multiple-male groups with apparent dominance hierarchies and strong competition for mates. Males in all-male groups, though, tend to have friendly interactions and socialise through play, grooming, and staying together,[[30]](#cite_note-30) and occasionally they even engage in homosexual interactions.[[36]](#cite_note-36)

### Reproduction and parenting[[edit](/index.php?title=(none)&action=edit&section=9)]

[thumb|right|Young gorilla riding on mother](/wiki/File:Gorillas_in_Uganda-3,_by_Fiver_Löcker.jpg) Females mature at 10–12 years (earlier in captivity), and males at 11–13 years. A female’s first ovulatory cycle occurs when she is six years of age, and is followed by a two-year period of adolescent infertility.[[37]](#cite_note-37) The estrous cycle lasts 30–33 days, with outward ovulation signs subtle compared to those of chimpanzees. The gestation period lasts 8.5 months. Female mountain gorillas first give birth at 10 years of age and have four-year interbirth intervals.[[37]](#cite_note-37) Males can be fertile before reaching adulthood. Gorillas mate year round.[[38]](#cite_note-38) Females will purse their lips and slowly approach a male while making eye contact. This serves to urge the male to mount her. If the male does not respond, then she will try to attract his attention by reaching towards him or slapping the ground.[[39]](#cite_note-39) In multiple-male groups, solicitation indicates female preference, but females can be forced to mate with multiple males.[[39]](#cite_note-39) Males incite copulation by approaching a female and displaying at her or touching her and giving a "train grunt".[[38]](#cite_note-38) Recently, gorillas have been observed engaging in [face-to-face sex](/wiki/Missionary_position), a trait once considered unique to humans and [bonobos](/wiki/Bonobo).[[40]](#cite_note-40)[thumb|left|Mother gorilla with 10-day-old infant](/wiki/File:Moka_with_baby_gorilla_at_Pittsburgh_Zoo_8,_2012-02-17.jpg)

Gorilla infants are vulnerable and dependent, thus mothers, their primary caregivers, are important to their survival.[[33]](#cite_note-33) Male gorillas are not active in caring for the young, but they do play a role in socialising them to other youngsters.[[41]](#cite_note-41) The silverback has a largely supportive relationship with the infants in his troop and shields them from aggression within the group.[[41]](#cite_note-41) Infants remain in contact with their mothers for the first five months and mothers stay near the silverback for protection.[[41]](#cite_note-41) Infants suckle at least once per hour and sleep with their mothers in the same nest.[[42]](#cite_note-42) Infants begin to break contact with their mothers after five months, but only for a brief period each time. By 12 months old, infants move up to five meters (16.4 ft) from their mothers. At around 18–21 months, the distance between mother and offspring increases and they regularly spend time away from each other.[[43]](#cite_note-43) In addition, nursing decreases to once every two hours.[[42]](#cite_note-42) Infants spend only half of their time with their mothers by 30 months. They enter their juvenile period at their third year, and this lasts until their sixth year. At this time, gorillas are weaned and they sleep in a separate nest from their mothers.[[41]](#cite_note-41) After their offspring are weaned, females begin to ovulate and soon become pregnant again.[[41]](#cite_note-41)[[42]](#cite_note-42) The presence of play partners, including the silverback, minimizes conflicts in weaning between mother and offspring.[[43]](#cite_note-43)

### Lifespan[[edit](/index.php?title=(none)&action=edit&section=10)]

A gorilla's lifespan is normally between 35 and 40 years, although zoo gorillas may live for 50 years or more. [Colo](/wiki/Colo_(gorilla)), a female western gorilla at the [Columbus Zoo and Aquarium](/wiki/Columbus_Zoo_and_Aquarium) is the oldest known gorilla, at 59 years of age (as of her birthday on 22 December 2015).[[44]](#cite_note-44)

## Communication[[edit](/index.php?title=(none)&action=edit&section=11)]

[Template:Redirect-distinguish](/wiki/Template:Redirect-distinguish) Twenty-five distinct [vocalisations](/wiki/Animal_communication) are recognised, many of which are used primarily for group communication within dense vegetation. Sounds classified as grunts and barks are heard most frequently while traveling, and indicate the whereabouts of individual group members.<ref name=HarcourtSH>[Template:Cite journal](/wiki/Template:Cite_journal)</ref> They may also be used during social interactions when discipline is required. Screams and roars signal alarm or warning, and are produced most often by silverbacks. Deep, rumbling belches suggest contentment and are heard frequently during feeding and resting periods. They are the most common form of intragroup communication.<ref name= Fossey1983>Fossey, D. (1983). Gorillas in the mist. Boston: Houghton Mifflin Company. ISBN 0-395-28217-9.</ref> Severe [aggression](/wiki/Aggression) is rare in stable groups, but when two mountain gorilla groups meet, the two silverbacks can sometimes engage in a fight to the death, using their canines to cause deep, gaping injuries.[[45]](#cite_note-45) For this reason, conflicts are most often resolved by displays and other threat behaviours that are intended to intimidate without becoming physical. The [ritualized](/wiki/Ritual) charge display is unique to gorillas. The entire sequence has nine steps: (1) progressively quickening hooting, (2) symbolic feeding, (3) rising bipedally, (4) throwing vegetation, (5) chest-beating with cupped hands, (6) one leg kick, (7) sideways running, two-legged to four-legged, (8) slapping and tearing vegetation, and (9) thumping the ground with palms to end display.<ref name=MapleHoff>[Template:Cite book](/wiki/Template:Cite_book)</ref>

## Intelligence[[edit](/index.php?title=(none)&action=edit&section=12)]

[Template:See also](/wiki/Template:See_also) Gorillas are considered highly intelligent. A few individuals in captivity, such as [Koko](/wiki/Koko_(gorilla)), have been taught a subset of [sign language](/wiki/Sign_language). Like the other [great apes](/wiki/Great_ape), gorillas can laugh, grieve, have "rich emotional lives", develop strong family bonds, make and use tools, and think about the past and future.[[46]](#cite_note-46) Some researchers believe gorillas have spiritual feelings or religious sentiments.[[1]](#cite_note-1) They have been shown to have cultures in different areas revolving around different methods of food preparation, and will show individual [colour preferences](/wiki/Colour_preferences).[[1]](#cite_note-1)

### Tool use[[edit](/index.php?title=(none)&action=edit&section=13)]

[|thumb|upright|A female gorilla exhibiting tool use by using a tree trunk as a support whilst fishing herbs](/wiki/File:Gorrila_tool_use-Efi.jpg) The following observations were made by a team led by Thomas Breuer of the [Wildlife Conservation Society](/wiki/Wildlife_Conservation_Society) in September 2005. Gorillas are now known to use [tools](/wiki/Tool) in the wild. A female gorilla in the [Nouabalé-Ndoki National Park](/wiki/Nouabalé-Ndoki_National_Park) in the [Republic of Congo](/wiki/Republic_of_Congo) was recorded using a stick as if to gauge the depth of water whilst crossing a [swamp](/wiki/Swamp). A second female was seen using a tree stump as a bridge and also as a support whilst fishing in the swamp. This means all of the [great apes](/wiki/Great_ape) are now known to use tools.[[47]](#cite_note-47) In September 2005, a two-and-a-half-year-old gorilla in the [Republic of Congo](/wiki/Republic_of_Congo) was discovered using rocks to smash open palm nuts inside a game sanctuary.<ref name=ns>[Template:Cite web](/wiki/Template:Cite_web)</ref> While this was the first such observation for a gorilla, over 40 years previously, [chimpanzees](/wiki/Chimpanzee) had been seen using tools in the wild 'fishing' for termites. Great [apes](/wiki/Ape) are endowed with semiprecision grips, and have been able to use both simple tools and even weapons, by improvising a club from a convenient fallen branch, for example.

## Scientific study[[edit](/index.php?title=(none)&action=edit&section=14)]

American physician and missionary [Thomas Staughton Savage](/wiki/Thomas_Staughton_Savage) obtained the first specimens (the skull and other bones) during his time in [Liberia](/wiki/Liberia).[[4]](#cite_note-4) The first scientific description of gorillas dates back to an article by Savage and the naturalist [Jeffries Wyman](/wiki/Jeffries_Wyman) in 1847 in *Proceedings of the Boston Society of Natural History*,[[48]](#cite_note-48)[[49]](#cite_note-49) where *Troglodytes gorilla* is described, now known as the [western gorilla](/wiki/Western_gorilla). Other species of gorilla were described in the next few years.<ref name=Groves2002/>

The explorer [Paul Du Chaillu](/wiki/Paul_Du_Chaillu) was the first westerner to see a live gorilla during his travel through western equatorial Africa from 1856 to 1859. He brought dead specimens to the UK in 1861.[[50]](#cite_note-50)[[51]](#cite_note-51)[[52]](#cite_note-52) The first systematic study was not conducted until the 1920s, when [Carl Akeley](/wiki/Carl_Akeley) of the [American Museum of Natural History](/wiki/American_Museum_of_Natural_History) traveled to Africa to hunt for an animal to be shot and stuffed. On his first trip, he was accompanied by his friends [Mary Bradley](/wiki/Mary_Bradley_(writer)), a mystery writer, her husband, and their young daughter Alice, who would later write science fiction under the pseudonym [James Tiptree Jr.](/wiki/James_Tiptree_Jr.) After their trip, Mary Bradley wrote *On the Gorilla Trail*. She later became an advocate for the conservation of gorillas, and wrote several more books (mainly for children). In the late 1920s and early 1930s, [Robert Yerkes](/wiki/Robert_Yerkes) and his wife Ava helped further the study of gorillas when they sent Harold Bigham to Africa. Yerkes also wrote a book in 1929 about the great apes. [thumb|right|Drawing of French explorer](/wiki/File:French_explorer_Paul_du_Chaillu_at_close_quarters_with_a_gorilla.jpg) [Paul Du Chaillu](/wiki/Paul_Du_Chaillu) at close quarters with a gorilla

After [World War II](/wiki/World_War_II), [George Schaller](/wiki/George_Schaller) was one of the first researchers to go into the field and study primates. In 1959, he conducted a systematic study of the mountain gorilla in the wild and published his work. Years later, at the behest of [Louis Leakey](/wiki/Louis_Leakey) and the [*National Geographic*](/wiki/National_Geographic_Society), [Dian Fossey](/wiki/Dian_Fossey) conducted a much longer and more comprehensive study of the mountain gorilla. When she published her work, many misconceptions and myths about gorillas were finally disproved, including the myth that gorillas are violent.

[Western lowland gorillas](/wiki/Western_lowland_gorilla) (*G. g. gorilla*) are believed to be one of the [zoonotic](/wiki/Zoonotic) origins of [HIV/AIDS](/wiki/HIV/AIDS). The SIVgor [Simian immunodeficiency virus](/wiki/Simian_immunodeficiency_virus) that infects them is similar to a certain strain of HIV-1.<ref name=VanHeuv>[Template:Cite journal](/wiki/Template:Cite_journal)</ref><ref name=Plantier>[Template:Cite journal](/wiki/Template:Cite_journal)</ref><ref name=Sharp2001>[Template:Cite journal](/wiki/Template:Cite_journal)</ref><ref name=Takebe2008>[Template:Cite book](/wiki/Template:Cite_book)</ref>

### Genome sequencing[[edit](/index.php?title=(none)&action=edit&section=15)]

The gorilla became the next-to-last great ape genus to have its genome sequenced. The first gorilla genome was generated with short read and Sanger sequencing using DNA from a female western lowland gorilla named Kamilah. This gave scientists further insight into the evolution and origin of humans. Despite the chimpanzees being the closest extant relatives of humans, 15% of the human genome was found to be more like that of the gorilla.[[53]](#cite_note-53) In addition, 30% of the gorilla genome "is closer to human or chimpanzee than the latter are to each other; this is rarer around coding genes, indicating pervasive selection throughout great ape evolution, and has functional consequences in gene expression."[[54]](#cite_note-54) Analysis of the gorilla genome has cast doubt on the idea that the rapid evolution of hearing genes gave rise to language in humans, as it also occurred in gorillas.[[55]](#cite_note-55)

## Cultural references[[edit](/index.php?title=(none)&action=edit&section=16)]

[Template:Main](/wiki/Template:Main) Since coming to the attention of western society in the 1860s,[[52]](#cite_note-52) gorillas have been a recurring element of many aspects of popular culture and media. For example, gorillas have featured prominently in monstrous fantasy films such as [*King Kong*](/wiki/King_Kong). [Pulp fiction](/wiki/Pulp_magazine), such as [*Tarzan*](/wiki/Tarzan) and [*Conan the Barbarian*](/wiki/Conan_the_Barbarian), has featured gorillas as physical opponents of the titular protagonists.

## Conservation status[[edit](/index.php?title=(none)&action=edit&section=17)]

The eastern gorilla is listed as [endangered](/wiki/Endangered_species) on the [IUCN Red List](/wiki/IUCN_Red_List),[[56]](#cite_note-56) with the mountain gorilla listed as [Critically Endangered](/wiki/Critically_Endangered).[[57]](#cite_note-57) The western gorilla and its subspecies are also listed as Critically Endangered.[[58]](#cite_note-58) Threats to gorilla survival include [habitat destruction](/wiki/Habitat_destruction) and [poaching](/wiki/Poaching) for the [bushmeat](/wiki/Bushmeat) trade. In 2004, a population of several hundred gorillas in the [Odzala National Park](/wiki/Odzala_National_Park), [Republic of Congo](/wiki/Republic_of_Congo) was essentially wiped out by the [Ebola virus](/wiki/Ebola_virus).[[59]](#cite_note-59) A 2006 study published in [*Science*](/wiki/Science_(journal)) concluded more than 5,000 gorillas may have died in recent outbreaks of the Ebola virus in central Africa. The researchers indicated in conjunction with commercial hunting of these apes, the virus creates "a recipe for rapid ecological [extinction](/wiki/Extinction)".[[60]](#cite_note-60) Conservation efforts include the [Great Apes Survival Project](/wiki/Great_Apes_Survival_Project), a partnership between the [United Nations Environment Programme](/wiki/United_Nations_Environment_Programme) and the [UNESCO](/wiki/UNESCO), and also an international treaty, the [Agreement on the Conservation of Gorillas and Their Habitats](/wiki/Gorilla_agreement), concluded under UNEP-administered [Convention on Migratory Species](/wiki/Bonn_Convention). The [Gorilla Agreement](/wiki/Gorilla_agreement) is the first legally binding instrument exclusively targeting gorilla conservation; it came into effect on 1 June 2008.

## See also[[edit](/index.php?title=(none)&action=edit&section=18)]

* [Bili ape](/wiki/Bili_ape)
* [Gorilla suit](/wiki/Gorilla_suit)
* [List of apes](/wiki/List_of_apes) – notable individual apes
* [List of fictional apes](/wiki/List_of_fictional_apes)

## References[[edit](/index.php?title=(none)&action=edit&section=19)]

[Template:Reflist](/wiki/Template:Reflist)

## External links[[edit](/index.php?title=(none)&action=edit&section=20)]

[Template:Commons](/wiki/Template:Commons) [Template:Wiktionary](/wiki/Template:Wiktionary) [Template:Wikispecies](/wiki/Template:Wikispecies) [Template:Wikinews](/wiki/Template:Wikinews)

* [Animal Diversity Web](http://animaldiversity.ummz.umich.edu/site/accounts/information/Gorilla_gorilla.html) – includes photos, artwork, and skull specimens of Gorilla gorilla
* [Pulitzer Center on Crisis Reporting](http://www.pulitzercenter.org/openitem.cfm?id=216) [International Gorilla Conservation Programme](/wiki/International_Gorilla_Conservation_Programme) (Video)
* [Primate Info Net *Gorilla* Factsheet](http://pin.primate.wisc.edu/factsheets/entry/gorilla) – taxonomy, ecology, behavior and conservation
* [San Diego Zoo Gorilla Factsheet](http://www.sandiegozoo.org/animalbytes/t-gorilla.html) – features a video and photos
* [World Wildlife Fund: Gorillas](http://web.archive.org/web/20041016101940/http://www.worldwildlife.org/gorillas/) – conservation, facts and photos
* [Gorilla protection](http://gorilla.wildlifedirect.org/) – Gorilla conservation
* [Welcome to the Year of the Gorilla 2009](http://www.yog2009.org/)
* [Virunga National Park](http://gorillacd.org/) – The Official Website for Virunga National Park, the Last Refuge for Congo's Mountain Gorillas

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