[Template:Redirect](/wiki/Template:Redirect" \o "Template:Redirect) [Template:For](/wiki/Template:For) [Template:Pp-semi](/wiki/Template:Pp-semi) [Template:Pp-move-indef](/wiki/Template:Pp-move-indef) [Template:Automatic taxobox](/wiki/Template:Automatic_taxobox)

**Chimpanzees** (sometimes called **chimps**) are one of two exclusively African species of [great ape](/wiki/Great_ape) that are currently [extant](/wiki/Extant_taxon). Native to [sub-Saharan Africa](/wiki/Sub-Saharan_Africa), both are currently found in the [Congo jungle](/wiki/Congo_jungle). Classified in the [genus](/wiki/Genus) *Pan*, they were once considered to be one species. However, since 1928, they have been recognized as two distinct species: the [common chimpanzee](/wiki/Common_chimpanzee) (*P. troglodytes*) live north of the Congo River and the [bonobo](/wiki/Bonobo) (*P. paniscus*) who live south.[[1]](#cite_note-1) In addition, *P. troglodytes* is divided into four [subspecies](/wiki/Subspecies), while *P. paniscus* has none. Based on [genome sequencing](/wiki/Genome_sequencing), the two extant *Pan* species diverged around one million years ago. The most obvious differences are that chimpanzees are somewhat larger, more aggressive and male dominated, while the bonobos are more gracile, peaceful, and female dominated.

Their hair is typically black or brown. Males and females differ in size and appearance. Both chimps and bonobos are some of the most social great apes, with social bonds occurring among individuals in large communities. Fruit is the most important component of a chimpanzee's diet; however, they will also eat vegetation, bark, honey, insects and even other chimps or monkeys. They can live over 30 years in both the wild and captivity.

Chimpanzees and bonobos are equally humanity's closest living relatives. As such, they are among the largest-brained, and most intelligent of primates; they use a variety of sophisticated tools and construct elaborate sleeping nests each night from branches and foliage. They have both been extensively studied for their learning abilities. There may even be distinctive cultures within populations. Field studies of *Pan troglodytes* were pioneered by primatologist [Jane Goodall](/wiki/Jane_Goodall). Both *Pan* species are considered to be endangered as human activities have caused severe declines in the populations and ranges of both species. Threats to wild panina populations include poaching, habitat destruction, and the illegal pet trade. Several conservation and rehabilitation organisations are dedicated to the survival of *Pan* species in the wild.

## Contents

* 1 Name[[edit](/index.php?title=(none)&action=edit&section=1)]
* 2 Distribution and habitat[[edit](/index.php?title=(none)&action=edit&section=2)]
* 3 Evolutionary history[[edit](/index.php?title=(none)&action=edit&section=3)]
  + 3.1 Evolutionary relationship[[edit](/index.php?title=(none)&action=edit&section=4)]
  + 3.2 Fossils[[edit](/index.php?title=(none)&action=edit&section=5)]
* 4 Anatomy and physiology[[edit](/index.php?title=(none)&action=edit&section=6)]
  + 4.1 Muscle strength[[edit](/index.php?title=(none)&action=edit&section=7)]
* 5 Behaviour[[edit](/index.php?title=(none)&action=edit&section=8)]
  + 5.1 Social structure[[edit](/index.php?title=(none)&action=edit&section=9)]
  + 5.2 Intelligence[[edit](/index.php?title=(none)&action=edit&section=10)]
  + 5.3 Tool use[[edit](/index.php?title=(none)&action=edit&section=11)]
  + 5.4 Nest-building[[edit](/index.php?title=(none)&action=edit&section=12)]
  + 5.5 Altruism and emotivity[[edit](/index.php?title=(none)&action=edit&section=13)]
  + 5.6 Communication[[edit](/index.php?title=(none)&action=edit&section=14)]
  + 5.7 Aggression[[edit](/index.php?title=(none)&action=edit&section=15)]
  + 5.8 Hunting[[edit](/index.php?title=(none)&action=edit&section=16)]
  + 5.9 Puzzle solving[[edit](/index.php?title=(none)&action=edit&section=17)]
* 6 History[[edit](/index.php?title=(none)&action=edit&section=18)]
* 7 Research and study[[edit](/index.php?title=(none)&action=edit&section=19)]
  + 7.1 Studies of language[[edit](/index.php?title=(none)&action=edit&section=20)]
  + 7.2 Memory[[edit](/index.php?title=(none)&action=edit&section=21)]
  + 7.3 Laughter in apes[[edit](/index.php?title=(none)&action=edit&section=22)]
* 8 Listed as endangered in the US[[edit](/index.php?title=(none)&action=edit&section=23)]
* 9 Chimpanzees as pets[[edit](/index.php?title=(none)&action=edit&section=24)]
* 10 In popular culture[[edit](/index.php?title=(none)&action=edit&section=25)]
  + 10.1 Portrayals in science fiction[[edit](/index.php?title=(none)&action=edit&section=26)]
* 11 See also[[edit](/index.php?title=(none)&action=edit&section=27)]
* 12 Notes[[edit](/index.php?title=(none)&action=edit&section=28)]
* 13 References[[edit](/index.php?title=(none)&action=edit&section=29)]
* 14 Further reading[[edit](/index.php?title=(none)&action=edit&section=30)]
* 15 External links[[edit](/index.php?title=(none)&action=edit&section=31)]

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

[Template:Human timeline](/wiki/Template:Human_timeline)[Template:Life timeline](/wiki/Template:Life_timeline) The first use of the name "chimpanze" is recorded in [*The London Magazine*](/wiki/The_London_Magazine) in 1738,[[2]](#cite_note-2) glossed as meaning "mockman" in a language of "the Angolans" (apparently from a [Bantu language](/wiki/Bantu_language), reportedly modern [Vili (Civili)](/wiki/Vili_language), a Zone H Bantu language, has the comparable *ci-mpenzi*[[3]](#cite_note-3)). The spelling *chimpanzee* is found in a 1758 supplement to [*Chamber's Cyclopædia*](/wiki/Cyclopædia,_or_an_Universal_Dictionary_of_Arts_and_Sciences).[[4]](#cite_note-4) The colloquialism "chimp" was most likely coined some time in the late 1870s.[[5]](#cite_note-5) The [common chimpanzee](/wiki/Common_chimpanzee) was named *Simia troglodytes* by [Johann Friedrich Blumenbach](/wiki/Johann_Friedrich_Blumenbach) in 1776. The species name *troglodytes* is a reference to the [*Troglodytae*](/wiki/Troglodytae) (literally "cave-goers"), an African people described by [Greco-Roman geographers](/wiki/Greco-Roman_geographers). Blumenbach first used it in his *De generis humani varietate nativa liber* ("[Book] on the natural varieties of the human genus") in 1776,[[6]](#cite_note-6)[[7]](#cite_note-7)Linnaeus 1758 had already used *Homo troglodytes* for a hypothetical mixture of human and [orangutan](/wiki/Orangutan).[[8]](#cite_note-8) The genus name *Pan* was first introduced by [Lorenz Oken](/wiki/Lorenz_Oken) in 1816. An alternative *Theranthropus* was suggested by [Brookes](/wiki/Joshua_Brookes) 1828 and *Chimpansee* by [Voigt](/wiki/Friedrich_Siegmund_Voigt) 1831. *Troglodytes* was not available, as it had been given as the name of a [genus of wren](/wiki/Troglodytes_(wren)) ([*Troglodytidae*](/wiki/Troglodytidae)) in 1809. The [International Commission on Zoological Nomenclature](/wiki/International_Commission_on_Zoological_Nomenclature) adopted *Pan* as the only official name of the genus in 1895.[[8]](#cite_note-8) The name is a reference to [Pan](/wiki/Pan_(god)), the Greek god of nature and wilderness.[[9]](#cite_note-9) The [bonobo](/wiki/Bonobo), in the past also referred to as the "pygmy chimpanzee", was given the species name of *paniscus* by [Ernst Schwarz](/wiki/Ernst_Schwarz) (1929), a diminutive of the theonym *Pan*.[[10]](#cite_note-10) In his book, [*The Third Chimpanzee*](/wiki/The_Third_Chimpanzee), J. Diamond proposes that *P. troglodytes* and *P. paniscus* belong with *H. sapiens* in the genus [*Homo*](/wiki/Homo_(genus)), rather than in *Pan*. He argues that other species have been reclassified by genus for less genetic similarity than that between humans and chimpanzees.

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

There are two species that we call Chimpanzees:

1. [Common Chimpanzees](/wiki/Common_Chimpanzee), [Pan troglodytes](/wiki/Pan_troglodytes), are found almost exclusively in the heavily forested regions of Central and West Africa. With at least four commonly accepted subspecies, their population and distribution is much more extensive that the 'Pygmy Chimpanzee' called [Bonobos](/wiki/Bonobo).
2. [Bonobos](/wiki/Bonobo), [Pan paniscus](/wiki/Pan_paniscus), are found only in Central Africa, south of the [Congo River](/wiki/Congo_River) and north of the [Kasai River](/wiki/Kasai_River) (a tributary of the Congo),<ref name=ancestor>[Template:Cite book](/wiki/Template:Cite_book)</ref> in the humid forests of the [Democratic Republic of Congo](/wiki/Geography_of_the_Democratic_Republic_of_the_Congo) of Central [Africa](/wiki/Africa).

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

### Evolutionary relationship[[edit](/index.php?title=(none)&action=edit&section=4)]

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

The genus *Pan* is part of the subfamily [Homininae](/wiki/Homininae), to which [humans](/wiki/Human) also belong. The lineages of chimpanzees and humans [separated](/wiki/Chimpanzee-human_last_common_ancestor) in a drawn-out process of speciation over the period of roughly between twelve and five million years ago,[[11]](#cite_note-11) making them humanity's closest living relative.[[12]](#cite_note-12) Research by [Mary-Claire King](/wiki/Mary-Claire_King) in 1973 found 99% identical [DNA](/wiki/DNA) between human beings and chimpanzees,[[13]](#cite_note-13) although research since has modified that finding to about 94%<ref name=ns>[Template:Cite journal](/wiki/Template:Cite_journal)</ref> commonality, with some of the difference occurring in [noncoding DNA](/wiki/Noncoding_DNA).

|  |  |
| --- | --- |
| **scope=col| Taxonomy of genus *Pan***[**[14]**](#cite_note-14) | **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 *Pan***   + [Common chimpanzee](/wiki/Common_chimpanzee) (*P. troglodytes*)     - [Central chimpanzee](/wiki/Central chimpanzee) (*P. t. troglodytes*)     - [Western chimpanzee](/wiki/Western chimpanzee) (*P. t. ellioti*)     - [Nigeria-Cameroon chimpanzee](/wiki/Nigeria-Cameroon_chimpanzee) (*P. t. ellioti*)     - [Eastern chimpanzee](/wiki/Eastern chimpanzee) (*P. t. schweinfurthii*)   + [Bonobo](/wiki/Bonobo) (*P. paniscus*) | [Template:Clade](/wiki/Template:Clade) |

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

The chimpanzee fossil record has long been absent and thought to have been due to the preservation bias in relation to their environment. However, in 2005, chimpanzee fossils were discovered and described by Sally McBrearty and colleagues. Existing chimpanzee populations in West and Central Africa are separate from the major [human fossil](/wiki/Human_fossil) sites in East Africa; however, chimpanzee fossils have been reported from [Kenya](/wiki/Kenya), indicating that both humans and members of the *Pan* clade were present in the [East African Rift](/wiki/East_African_Rift) Valley during the [Middle Pleistocene](/wiki/Middle_Pleistocene).<ref name=firstfossil>[Template:Cite journal](/wiki/Template:Cite_journal)</ref>

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

[thumb|Human and chimp skulls and brains (not to scale), as illustrated in](/wiki/File:Man&chimpbrains.png) [Gervais'](/wiki/Paul_Gervais) *Histoire naturelle des mammifères* [thumb|The chimpanzee's brain on the left and the man's brain on the right have been scaled to the same size to show the relative proportions of their parts. These drawings were in a book made in 1904 by](/wiki/File:Chimpanzee_and_human_brain_scaled_to_the_same_size_Thomas_Henry_Huxley.png) [Thomas Henry Huxley](/wiki/Thomas_Henry_Huxley).[[15]](#cite_note-15)

A chimpanzee's arms are longer than its legs. The male common chimp stands up to [Template:Convert](/wiki/Template:Convert) high and weighs as much as [Template:Convert](/wiki/Template:Convert); the female is somewhat smaller. When extended, the common chimp’s long arms span one and a half times the body’s height.[[16]](#cite_note-16) The bonobo is slightly shorter and thinner than the common chimpanzee, but has longer limbs. In trees, both species climb with their long, powerful arms; on the ground, chimpanzees usually [knuckle-walk](/wiki/Knuckle-walking), or walk on all fours, clenching their fists and supporting themselves on the knuckles. Chimpanzees are better suited for walking than orangutans, because the chimp's feet have broader soles and shorter toes. The bonobo has proportionately longer upper limbs and walks upright more often than does the common chimpanzee. Both species can walk upright on two legs when carrying objects with their hands and arms.

The chimpanzee is tailless; its coat is dark; its face, fingers, palms of the hands, and soles of the feet are hairless. The exposed skin of the face, hands, and feet varies from pink to very dark in both species, but is generally lighter in younger individuals and darkens with maturity. A University of Chicago Medical Centre study has found significant genetic differences between chimpanzee populations.[[17]](#cite_note-17) A bony shelf over the eyes gives the forehead a receding appearance, and the nose is flat. Although the jaws protrude, a chimp's lips are thrust out only when it pouts.

The brain of a chimpanzee has been measured at a general range of 282–500 [cc](/wiki/Cubic_centimetres).[[18]](#cite_note-18) The human brain, in contrast, is about three times larger, with a reported average volume of about 1330 cc.[[19]](#cite_note-19) [Template:Anchor](/wiki/Template:Anchor) Chimpanzees reach [puberty](/wiki/Puberty) between the age of eight and ten years.[Template:Citation neededA](/wiki/Template:Citation_needed) chimpanzee's [testicles](/wiki/Testicle) are unusually large for their body size, with a combined weight of about [Template:Convert](/wiki/Template:Convert) compared to a gorilla's [Template:Convert](/wiki/Template:Convert) or a human's [Template:Convert](/wiki/Template:Convert). This relatively great size is generally attributed to [sperm competition](/wiki/Sperm_competition) due to the [polyandrous](/wiki/Polyandry#Animal_polyandry) nature of chimpanzee [mating behaviour](/wiki/Animal_sexual_behaviour).<ref name=rat\_behavior>[Template:Cite web](/wiki/Template:Cite_web)</ref> One study estimates that chimps live about 33 years for males, 37 years for females, in the wild,[[20]](#cite_note-20) but some have lived longer than 60 years in captivity.[Template:Citation needed](/wiki/Template:Citation_needed)

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

Chimpanzees are known for possessing great amount of muscle strength, especially in their arms. However, compared to humans the amount of strength reported in media and popular science is greatly exaggerated with numbers of four to eight times the muscle strength of a human. These numbers stem from two studies in 1923 and 1926 by a biologist namned John Bauman.[[21]](#cite_note-21)[[22]](#cite_note-22) These studies were refuted in 1943 and an adult male chimp was found to pull about the same weight as an adult man.[[23]](#cite_note-23) Corrected for their smaller body sizes, chimpanzees were found to be stronger than humans but not anywhere near four to eight times. In the 1960s these tests were repeated and chimpanzees were found to have twice the strength of a human when it came to pulling weights. The reason for the higher strength seen in chimpanzees compared to humans are thought to come from longer skeletal muscle fibers that can generate twice the work output over a wider range of motion compared to skeletal muscle fibers in humans.

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

[thumb|(video) Female chimpanzee at Tobu Zoo in](/wiki/File:Pan_troglodytes-female-TobuZoo2012.ogv) [Saitama](/wiki/Saitama_Prefecture), [Japan](/wiki/Japan).

Anatomical differences between the common chimpanzee and the bonobo are slight, but sexual and social behaviours are markedly different. The common chimpanzee has an [omnivorous](/wiki/Omnivore) [diet](/wiki/Diet_(nutrition)), a troop [hunting](/wiki/Predation) culture based on beta males led by an [alpha male](/wiki/Alpha_male), and highly complex social relationships. The bonobo, on the other hand, has a mostly [frugivorous](/wiki/Frugivorous) diet and an [egalitarian](/wiki/Egalitarian), [nonviolent](/wiki/Nonviolent), [matriarchal](/wiki/Matriarchal), [sexually receptive behaviour](/wiki/Animal_sexual_behaviour#Bonobo).[[24]](#cite_note-24) Bonobos frequently have sex, sometimes to help prevent and resolve conflicts. Different groups of chimpanzees also have different cultural behaviour with preferences for types of tools.[[25]](#cite_note-25) The common chimpanzee tends to display greater aggression than does the bonobo.[[26]](#cite_note-26) The average, captive chimpanzee sleeps 9.7 hours per day.[[27]](#cite_note-27) Contrary to what the scientific name may suggest, chimpanzees do not typically spend their time in caves, but there have been reports of some of them seeking refugee in caves because of the heat during daytime.[[28]](#cite_note-28)

### Social structure[[edit](/index.php?title=(none)&action=edit&section=9)]

[Template:Unreferenced section](/wiki/Template:Unreferenced_section) [left|thumb|Bonobo](/wiki/File:Bonobo_009.jpg) Chimpanzees live in large multi-male and multi-female [social groups](/wiki/Social_group), which are called communities. Within a community, the position of an individual and the influence the individual has on others dictates a definite [social hierarchy](/wiki/Social_hierarchy). Chimpanzees live in a leaner hierarchy wherein more than one individual may be dominant enough to dominate other members of lower rank. Typically, a dominant male is referred to as the [alpha male](/wiki/Alpha_male). The alpha male is the highest-ranking male that controls the group and maintains order during disputes. In chimpanzee society, the 'dominant male' sometimes is not the largest or strongest male but rather the most manipulative and political male that can influence the goings on within a group. Male chimpanzees typically attain dominance by cultivating allies who will support that individual during future ambitions for power. The alpha male regularly displays by puffing his normally slim coat up to increase view size and charge to seem as threatening and as powerful as possible; this behaviour serves to intimidate other members and thereby maintain power and authority, and it may be fundamental to the alpha male's holding on to his status. Lower-ranking chimpanzees will show respect by submissively gesturing in [body language](/wiki/Body_language) or reaching out their hands while grunting. Female chimpanzees will show deference to the alpha male by presenting their hindquarters.

[thumb|Common chimpanzees in](/wiki/File:Gombe_Stream_NP_gegenseitiges_Lausen.jpg) [Gombe Stream National Park](/wiki/Gombe_Stream_National_Park) Female chimpanzees also have a hierarchy, which is influenced by the position of a female individual within a group. In some chimpanzee communities, the young females may inherit high status from a high-ranking mother. Dominant females will also ally to dominate lower-ranking females: whereas males mainly seek dominant status for its associated mating privileges and sometimes violent domination of subordinates, females seek dominant status to acquire resources such as food, as high-ranking females often have first access to them. Both genders acquire dominant status to improve social standing within a group.

Community female acceptance is necessary for alpha male status; females must ensure that their group visits places that supply them with enough food. A group of dominant females will sometimes oust an alpha male which is not to their preference and back another male, in whom they see potential for leading the group as a successful alpha male.

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

[Template:Further](/wiki/Template:Further) [thumb|right|340px|Diagram of brain – topography of the main groups of foci in the motor field of chimpanzee](/wiki/File:1911_EB_Chimpanzee_Brain.png) Chimpanzees make tools and use them to acquire foods and for social displays; they have sophisticated hunting strategies requiring cooperation, influence and rank; they are status conscious, manipulative and capable of deception; they can learn to use symbols and understand aspects of human language including some relational [syntax](/wiki/Syntax_(logic)), concepts of number and numerical sequence;[[29]](#cite_note-29) and they are capable of spontaneous planning for a future state or event.[[30]](#cite_note-30)

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

[thumb|Common chimpanzee using a stick](/wiki/File:Chimpanzee_and_stick.jpg) In October 1960, [Jane Goodall](/wiki/Jane_Goodall) observed the use of tools among chimpanzees. Recent research indicates that chimpanzees' use of [stone tools](/wiki/Stone_tool) dates back at least 4,300 years (about 2,300 BC).[[31]](#cite_note-31) One example of chimpanzee tool usage behavior includes the use of a large stick as a tool to dig into termite mounds, and the subsequent use of a small stick altered into a tool that is used to "fish" the termites out of the mound.[[32]](#cite_note-32) Chimpanzees are also known to use smaller stones as hammers and a large one as an anvil in order to break open nuts.[[33]](#cite_note-33) In the 1970s, reports of chimpanzees using rocks or sticks as weapons were anecdotal and controversial.[[34]](#cite_note-34) However, a 2007 study claimed to reveal the use of spears, which common chimpanzees in [Senegal](/wiki/Senegal) sharpen with their teeth and use to stab and pry [Senegal bushbabies](/wiki/Senegal_bushbaby) out of small holes in trees.[[35]](#cite_note-35)[[36]](#cite_note-36) Prior to the discovery of tool use in chimps, humans were believed to be the only [species](/wiki/Species) to make and use tools; however, now several other [tool-using species](/wiki/Tool_use_by_animals) are now known.[[37]](#cite_note-37)[[38]](#cite_note-38)

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

Nest-building, sometimes considered to be a form of tool use, is seen when chimpanzees construct arboreal night nests by lacing together branches from one or more trees to build a safe, comfortable place to sleep; infants learn this process by watching their mothers. The nest provides a sort of mattress, which is supported by strong branches for a foundation, and then lined with softer leaves and twigs; the minimum diameter is [Template:Convert](/wiki/Template:Convert) and may be located at a height of [Template:Convert](/wiki/Template:Convert). Both day and night nests are built, and may be located in groups.[[39]](#cite_note-39) A study in 2014 found that the [Muhimbi](/wiki/Cynometra_alexandri) tree is favoured for nest building by chimpanzees in Uganda due to its physical properties, such as bending strength, inter-node distance, and leaf surface area.[[40]](#cite_note-40)

### Altruism and emotivity[[edit](/index.php?title=(none)&action=edit&section=13)]

[left|thumb|upright|Chimpanzee mother and baby](/wiki/File:Chimpanzee_mom_and_baby_cropped.jpg) Studies have shown chimpanzees engage in apparently [altruistic](/wiki/Altruism) behaviour within groups.[[41]](#cite_note-41)[[42]](#cite_note-42) Some researchers have suggested that chimpanzees are indifferent to the welfare of unrelated group members,[[43]](#cite_note-43) but a more recent study of wild chimpanzees found that both male and female adults would adopt orphaned young of their group. Also, different groups sometimes share food, form coalitions, and cooperate in hunting and border patrolling.[[44]](#cite_note-44) Sometimes, chimpanzees have adopted young that come from unrelated groups. And in some rare cases, even male chimps have been shown to take care of abandoned infant chimps of an unrelated group, though in most cases they would kill the infant.[Template:Citation needed](/wiki/Template:Citation_needed)

According to a literature summary by James W. Harrod, evidence for [chimpanzee emotivity](/wiki/Emotion_in_animals#Primates) includes display of [mourning](/wiki/Mourning); "incipient [romantic love](/wiki/Romantic_love)"; [rain dances](/wiki/Rain_dance); appreciation of natural beauty (such as a sunset over a lake); curiosity and respect towards other wildlife (such as the [python](/wiki/Pythonidae), which is neither a threat nor a food source to chimpanzees); altruism toward other species (such as feeding turtles); and [animism](/wiki/Animism), or "pretend play", when chimps cradle and [groom](/wiki/Social_grooming) rocks or sticks.[[45]](#cite_note-45)

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

Chimps communicate in a manner that is similar to that of human nonverbal communication, using vocalizations, hand gestures, and facial expressions. There is even some evidence that they can recreate human speech.[[46]](#cite_note-46) Research into the chimpanzee brain has revealed that when chimpanzees communicate, an area in the brain is activated which is in the same position as the language center called [Broca's area](/wiki/Broca's_area) in human brains.[[47]](#cite_note-47) There is some debate as to whether chimpanzees have the ability to express hierarchical ideas in language. Studies have found that chimps are capable of learning a limited set of sign language symbols, which they can use to communicate with human trainers. However, it is clear that there are distinct limits to the complexity of knowledge structures with which chimps are capable of dealing[Template:Citation needed](/wiki/Template:Citation_needed). The sentences that they can express are limited to specific simple noun-verb sequences, and are they do not seem capable of the extent of thought complexity characteristic of humans.

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

Adult common chimpanzees, particularly males, can be very aggressive. They are highly territorial and are known to kill other chimps.[[48]](#cite_note-48) [thumb|Common chimpanzee with hunted bushbuck on a tree in Gombe Stream National Park](/wiki/File:Gombe_Stream_NP_Beute.jpg)

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

Chimpanzees also engage in targeted hunting of lower-order primates, such as the [red colobus](/wiki/Red_colobus)[[49]](#cite_note-49) and [bush babies](/wiki/Galago),[[50]](#cite_note-50)[[51]](#cite_note-51) and use the meat from these kills as a "social tool" within their community.[[52]](#cite_note-52)[Template:How](/wiki/Template:How)

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

In February 2013, a study found that chimpanzees solve puzzles for entertainment.[[53]](#cite_note-53)

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

[thumb|alt=62-year-old chimpanzee|](/wiki/File:2006-12-09_Chimpanzee_Gregoire_D_Bruyere.JPG)[Gregoire](/wiki/Gregoire_(chimpanzee)): 62-year-old chimpanzee Chimps, as well as other apes, had also been purported to have been known to ancient writers, but mainly as myths and legends on the edge of European and Near Eastern societal consciousness. Apes are mentioned variously by [Aristotle](/wiki/Aristotle). The English word *ape* translates Hebrew *qőf* in [English translations of the Bible](/wiki/English_translations_of_the_Bible) ([1 Kings](/wiki/1_Kings) 10:22), but the word may refer to a monkey rather than an ape proper.

The diary of [Portuguese](/wiki/Portugal) explorer [Duarte Pacheco Pereira](/wiki/Duarte_Pacheco_Pereira) (1506), preserved in the Portuguese National Archive (*Torre do Tombo*), is probably the first written document to acknowledge that chimpanzees built their own rudimentary tools. The first of these early transcontinental chimpanzees came from Angola and were presented as a gift to [Frederick Henry, Prince of Orange](/wiki/Frederick_Henry,_Prince_of_Orange) in 1640, and were followed by a few of its brethren over the next several years. Scientists described these first chimpanzees as "[pygmies](/wiki/Pygmies)", and noted the animals' distinct similarities to humans. The next two decades, a number of the creatures were imported into Europe, mainly acquired by various zoological gardens as entertainment for visitors.

[thumb|upright|left|](/wiki/File:HugoRheinholdApeWithSkull.DarwinMonkey.2.jpg)[Hugo Rheinhold's](/wiki/Hugo_Rheinhold) [*Affe mit Schädel*](/wiki/Affe_mit_Schädel) ("Ape with skull"). [Darwin's](/wiki/Charles_Darwin) [theory of natural selection](/wiki/Theory_of_natural_selection) (published in 1859) spurred scientific interest in chimpanzees, as in much of [life science](/wiki/Biology), leading eventually to numerous studies of the animals in the wild and captivity. The observers of chimpanzees at the time were mainly interested in behaviour as it related to that of humans. This was less strictly and disinterestedly scientific than it might sound, with much attention being focused on whether or not the animals had traits that could be considered 'good'; the intelligence of chimpanzees was often significantly exaggerated, as immortalized in [Hugo Rheinhold's](/wiki/Hugo_Rheinhold) [*Affe mit Schädel*](/wiki/Affe_mit_Schädel) (see image, left). By the end of the 19th century, chimpanzees remained very much a mystery to humans, with very little factual scientific information available.

In the 20th century, a new age of scientific research into chimpanzee behaviour began. Before 1960, almost nothing was known about chimpanzee behaviour in their natural habitats. In July of that year, [Jane Goodall](/wiki/Jane_Goodall) set out to [Tanzania's](/wiki/Tanzania) [Gombe](/wiki/Gombe_Stream_National_Park) forest to live among the chimpanzees, where she primarily studied the members of the [Kasakela chimpanzee community](/wiki/Kasakela_chimpanzee_community). Her discovery that chimpanzees made and used tools was groundbreaking, as humans were previously believed to be the only species to do so. The most progressive early studies on chimpanzees were spearheaded primarily by [Wolfgang Köhler](/wiki/Wolfgang_Köhler) and [Robert Yerkes](/wiki/Robert_Yerkes), both of whom were renowned psychologists. Both men and their colleagues established laboratory studies of chimpanzees focused specifically on learning about the intellectual abilities of chimpanzees, particularly [problem-solving](/wiki/Problem-solving). This typically involved basic, practical tests on laboratory chimpanzees, which required a fairly high intellectual capacity (such as how to solve the problem of acquiring an out-of-reach [banana](/wiki/Banana)). Notably, Yerkes also made extensive observations of chimpanzees in the wild which added tremendously to the scientific understanding of chimpanzees and their behaviour. Yerkes studied chimpanzees until [World War II](/wiki/World_War_II), while Köhler concluded five years of study and published his famous *Mentality of Apes* in 1925 (which is coincidentally when Yerkes began his analyses), eventually concluding, "chimpanzees manifest intelligent behaviour of the general kind familiar in human beings ... a type of behaviour which counts as specifically human" (1925).<ref name=goodall>[Template:Cite book](/wiki/Template:Cite_book)</ref> [thumb|right|Chimpanzee at the](/wiki/File:Lightmatter_chimp.jpg) [Los Angeles Zoo](/wiki/Los_Angeles_Zoo) The August 2008 issue of the *American Journal of Primatology* reported results of a year-long study of chimpanzees in Tanzania’s [Mahale Mountains National Park](/wiki/Mahale_Mountains_National_Park), which produced evidence of chimpanzees becoming sick from viral infectious diseases they had likely contracted from humans. Molecular, microscopic and epidemiological investigations demonstrated the chimpanzees living at Mahale Mountains National Park have been suffering from a respiratory disease that is likely caused by a variant of a human [paramyxovirus](/wiki/Paramyxovirus).[[54]](#cite_note-54)

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

[Template:See also](/wiki/Template:See_also) As of November 2007, about 1,300 chimpanzees were housed in 10 U.S. laboratories (out of 3,000 great apes living in captivity there), either wild-caught, or acquired from circuses, animal trainers, or zoos.[[55]](#cite_note-55) Most of the labs either conduct or make the chimps available for invasive research,<ref name=HSUSmap>[Template:Cite web](/wiki/Template:Cite_web)</ref> defined as "inoculation with an infectious agent, surgery or biopsy conducted for the sake of research and not for the sake of the chimpanzee, and/or drug testing".<ref name=HSUSresearch>[Template:Cite web](/wiki/Template:Cite_web)</ref> Two federally funded laboratories use chimps: the [Yerkes National Primate Research Center](/wiki/Yerkes_National_Primate_Research_Center) at [Emory University](/wiki/Emory_University) in Atlanta, Georgia, and the [Southwest National Primate Center](/wiki/Southwest_National_Primate_Center) in San Antonio, Texas.<ref name=Lovgren>Lovgren, Stefan. [Should Labs Treat Chimps More Like Humans?](http://news.nationalgeographic.com/news/2005/09/0906_050906_chimplabs.html), *National Geographic News*, September 6, 2005.</ref> Five hundred chimps have been retired from laboratory use in the U.S. and live in [animal sanctuaries](/wiki/Animal_sanctuary) in the U.S. or Canada.<ref name=HSUSmap/> [left|thumb|](/wiki/File:Chimpanzee_Ham_in_Biopack_Couch_for_MR-2_flight_MSFC-6100114.jpg)[Ham the Astrochimp](/wiki/Ham_the_Chimp) before being inserted into the [Mercury-Redstone 2](/wiki/Mercury-Redstone_2) capsule in 1961

Chimpanzees used in biomedical research tend to be used repeatedly over decades, rather than used and killed as with most laboratory animals. Some individual chimps currently in U.S. laboratories have been used in experiments for over 40 years.<ref name=HSUSbetter>[Chimps Deserve Better](https://web.archive.org/web/20080215112131/http://www.hsus.org/animals_in_research/chimps_deserve_better/), Humane Society of the United States.</ref> According to [Project R&R](/wiki/Project_R&R), a campaign to release chimps held in U.S. labs—run by the New England Anti-Vivisection Society in conjunction with Jane Goodall and other primate researchers—the oldest known chimp in a U.S. lab is Wenka, which was born in a laboratory in Florida on May 21, 1954.[[56]](#cite_note-56) She was removed from her mother on the day of birth to be used in a vision experiment that lasted 17 months, then sold as a pet to a family in North Carolina. She was returned to the Yerkes National Primate Research Center in 1957 when she became too big to handle. Since then, she has given birth six times, and has been the subject of research into alcohol use, oral contraceptives, aging, and cognitive studies.<ref name=R&RWenka>[Wenka](http://www.releasechimps.org/chimpanzees/their-stories/wenka/), Project R&R, New England Anti-Vivisection Society.</ref>

With the publication of the [chimpanzee genome](/wiki/Chimpanzee_genome), plans to increase the use of chimps in labs are reportedly increasing, with some scientists arguing that the federal moratorium on breeding chimps for research should be lifted.<ref name=Lovgren/><ref name=Langley15>[Langley, Gill](/wiki/Gill_Langley) (June 2006). [Next of Kin: A Report on the Use of Primates in Experiments](http://www.eceae.org/english/documents/NoKReport.pdf), British Union for the Abolition of Vivisection, p. 15, citing [Template:Cite journal](/wiki/Template:Cite_journal)</ref> A five-year moratorium was imposed by the U.S. National Institutes of Health in 1996, because too many chimps had been bred for HIV research, and it has been extended annually since 2001.<ref name=Lovgren/>

Other researchers argue that chimps are unique animals and either should not be used in research, or should be treated differently. Pascal Gagneux, an evolutionary biologist and primate expert at the [University of California, San Diego](/wiki/University_of_California,_San_Diego), argues, given chimpanzees' sense of self, tool use, and genetic similarity to human beings, studies using chimps should follow the ethical guidelines used for human subjects unable to give consent.<ref name=Lovgren/> Also, a recent study suggests chimpanzees which are retired from labs exhibit a form of [posttraumatic stress disorder](/wiki/Posttraumatic_stress_disorder).[[57]](#cite_note-57) Stuart Zola, director of the Yerkes National Primate Research Laboratory, disagrees. He told *National Geographic*: "I don't think we should make a distinction between our obligation to treat humanely any species, whether it's a rat or a monkey or a chimpanzee. No matter how much we may wish it, chimps are not human."<ref name=Lovgren/>

An increasing number of governments are enacting a [great ape research ban](/wiki/Great_ape_research_ban) forbidding the use of chimpanzees and other [great apes](/wiki/Great_ape) in research or toxicology testing.[[58]](#cite_note-58) As of 2006, [Austria](/wiki/Austria), [New Zealand](/wiki/New_Zealand), the [Netherlands](/wiki/Netherlands), [Sweden](/wiki/Sweden), and the [UK](/wiki/UK) had introduced such bans.<ref name=Langley12>[Langley, Gill](/wiki/Gill_Langley) (June 2006). [Next of Kin: A Report on the Use of Primates in Experiments](http://www.eceae.org/english/documents/NoKReport.pdf), British Union for the Abolition of Vivisection, p. 12.</ref>

### Studies of language[[edit](/index.php?title=(none)&action=edit&section=20)]

[Template:Main](/wiki/Template:Main) [thumb|Side profile of a chimpanzee](/wiki/File:ChimpanzeeProfile.jpg) Scientists have long been fascinated with the studies of language, believing it to be a unique human cognitive ability. To test this hypothesis, scientists have attempted to teach human language to several species of great apes. One early attempt by Allen and Beatrix Gardner in the 1960s involved spending 51 months teaching [American Sign Language](/wiki/American_Sign_Language) (ASL) to a chimpanzee named [Washoe](/wiki/Washoe_(chimpanzee)). The Gardners reported Washoe learned 151 signs, and she had spontaneously taught them to other chimpanzees.[[59]](#cite_note-59) Over a longer period of time, Washoe learned over 800 signs.[[60]](#cite_note-60) Debate is ongoing among some scientists (such as [David Premack](/wiki/David_Premack)), about nonhuman great apes' ability to learn language. Since the early reports on Washoe, numerous other studies have been conducted, with varying levels of success,[[61]](#cite_note-61) including one involving a chimpanzee named, in parody, [Nim Chimpsky](/wiki/Nim_Chimpsky), trained by Herbert Terrace of [Columbia University](/wiki/Columbia_University). Although his initial reports were quite positive, in November 1979, Terrace and his team (including psycholinguist [Thomas Bever](/wiki/Thomas_Bever)) re-evaluated the videotapes of Nim with his trainers, analyzing them frame by frame for signs, as well as for exact context (what was happening both before and after Nim’s signs). In the reanalysis, Terrace and Bever concluded Nim's utterances could be explained merely as prompting on the part of the experimenters, as well as mistakes in reporting the data. "Much of the apes’ behaviour is pure drill," he said. "Language still stands as an important definition of the human species." In this reversal, Terrace now argued Nim's use of ASL was not like human [language acquisition](/wiki/Language_acquisition). Nim never initiated conversations himself, rarely introduced new words, and simply imitated what the humans did. More importantly, Nim's word strings varied in their ordering, suggesting that he was incapable of [syntax](/wiki/Syntax). Nim’s sentences also did not grow in length, unlike human children whose vocabulary and sentence length show a strong positive correlation.[[62]](#cite_note-62)

### Memory[[edit](/index.php?title=(none)&action=edit&section=21)]

A 30-year study at [Kyoto University](/wiki/Kyoto_University)’s [Primate Research Institute](/wiki/Primate_Research_Institute) has shown that chimps are able to learn to recognise the numbers 1 through 9 and their values. The chimps further show an aptitude for [photographic memory](/wiki/Photographic_memory), demonstrated in experiments in which the jumbled digits are flashed onto a computer screen for less than a quarter of a second, after which the chimp, [Ayumu](/wiki/Ayumu_(chimpanzee)), is able to correctly and quickly point to the positions where they appeared in ascending order. The same experiment was failed by human world memory champion [Ben Pridmore](/wiki/Ben_Pridmore) on most attempts.[[63]](#cite_note-63)

### Laughter in apes[[edit](/index.php?title=(none)&action=edit&section=22)]

[thumb|alt=Young chimpanzees|Young chimpanzees playing](/wiki/File:2006-12-09_Chipanzees_D_Bruyere.JPG) [Laughter](/wiki/Laughter) might not be confined or unique to humans. The differences between chimpanzee and human laughter may be the result of adaptations that have evolved to enable human speech. Self-awareness of one's situation as seen in the [mirror test](/wiki/Mirror_test), or the ability to identify with another's predicament (see [mirror neurons](/wiki/Mirror_neurons)), are prerequisites for laughter,[Template:Citation needed](/wiki/Template:Citation_needed) so animals may be laughing for the same reasons that humans do.

Chimpanzees, [gorillas](/wiki/Gorilla), and [orangutans](/wiki/Orangutan) show laughter-like vocalizations in response to physical contact, such as wrestling, play-chasing, or [tickling](/wiki/Tickling). This is documented in wild and captive chimpanzees. Common chimpanzee laughter is not readily recognisable to humans as such, because it is generated by alternating inhalations and exhalations that sound more like breathing and panting. Instances in which nonhuman primates have expressed joy have been reported. One study analyzed and recorded sounds made by human babies and [bonobos](/wiki/Bonobo) when tickled. Although the bonobo's laugh was a higher frequency, the laugh followed a pattern similar to that of human babies and included similar facial expressions. Humans and chimpanzees share similar ticklish areas of the body, such as the armpits and belly. The enjoyment of tickling in chimpanzees does not diminish with age.<ref name=Discover2003>[Template:Cite journal](/wiki/Template:Cite_journal)</ref> [Template:See also](/wiki/Template:See_also)

## Listed as endangered in the US[[edit](/index.php?title=(none)&action=edit&section=23)]

The US Fish and Wildlife Service finalized a rule on June 12, 2015[[64]](#cite_note-64) Listing All Chimpanzees as Endangered Under the Endangered Species Act Certain activities involving chimpanzees will be prohibited without a permit, including import and export of the animals into and out of the United States, "take" (defined by the ESA as harm, harass, kill, injure, etc.) within the United States, and interstate and foreign commerce.

Permits will be issued for these activities only for scientific purposes that benefit the species in the wild, or to enhance the propagation or survival of chimpanzees, including habitat restoration and research on chimpanzees in the wild that contributes to improved management and recovery.

## Chimpanzees as pets[[edit](/index.php?title=(none)&action=edit&section=24)]

[Template:See also](/wiki/Template:See_also) Chimpanzees have traditionally been kept as [pets](/wiki/Pet) in a few African villages, especially in the [Democratic Republic of Congo](/wiki/Democratic_Republic_of_Congo). In [Virunga National Park](/wiki/Virunga_National_Park) in the east of the country, the park authorities regularly confiscate chimpanzees from people keeping them as pets.[[65]](#cite_note-65) Chimpanzees are popular as [wild pets](/wiki/Exotic_pet) in many areas despite their strength, aggression, and wild nature. Even in areas where keeping non-human primates as pets is illegal, the exotic pet trade continues to prosper and some people keep chimpanzees as pets mistakenly believing that they will bond with them for life. As they grow, so do their strength and aggression; some owners and others interacting with the animals have lost fingers and suffered severe facial damage among other injuries sustained in attacks. In addition to the animals' hostile potential and strength well beyond any human being, chimpanzees physically mature a lot more proportionally than do human beings, and even among the most cleanly and well-organized of housekeepers, maintaining cleanliness and control of chimpanzees is physically demanding to the point that it is impossible for humans to control, especially due to the animals' strength and aggression.[[66]](#cite_note-66)

## In popular culture[[edit](/index.php?title=(none)&action=edit&section=25)]

[Template:See also](/wiki/Template:See_also)

Chimpanzees have been commonly stereotyped in [popular culture](/wiki/Popular_culture), where they are most often cast in standardized roles as childlike companions, [sidekicks](/wiki/Sidekick) or [clowns](/wiki/Clowns).[[67]](#cite_note-67) They are especially suited for the latter role on account of their prominent facial features, long limbs and fast movements, which humans often find amusing. Accordingly, entertainment acts featuring chimpanzees dressed up as humans have been traditional staples of [circuses](/wiki/Circus) and [stage shows](/wiki/Stage_show).[[67]](#cite_note-67) In the age of television, a new genre of chimp act emerged in the [United States](/wiki/United_States): series whose cast consisted entirely of chimpanzees dressed as humans and "speaking" lines dubbed by human actors.[[67]](#cite_note-67) These shows, examples of which include [*Lancelot Link, Secret Chimp*](/wiki/Lancelot_Link,_Secret_Chimp) in the 1970s or [*The Chimp Channel*](/wiki/The_Chimp_Channel) in the 1990s, relied on the novelty of their ape cast to make their timeworn, [low comedy](/wiki/Low_comedy) gags funny.[[67]](#cite_note-67) Their chimpanzee "actors" were as interchangeable as the apes in a circus act, being amusing as chimpanzees and not as individuals.[[67]](#cite_note-67) Animal rights groups have urged a stop to this practice, considering it animal abuse.[[68]](#cite_note-68) When chimpanzees appear in other TV shows, they generally do so as [comic relief](/wiki/Comic_relief) [sidekicks](/wiki/Sidekick) to humans. In that role, for instance, [J. Fred Muggs](/wiki/J._Fred_Muggs) appeared with [*Today Show*](/wiki/Today_(NBC_program)) host [Dave Garroway](/wiki/Dave_Garroway) in the 1950s, Judy on [*Daktari*](/wiki/Daktari) in the 1960s and Darwin on [*The Wild Thornberrys*](/wiki/The_Wild_Thornberrys) in the 1990s.[[67]](#cite_note-67) In contrast to the fictional depictions of other animals, such as dogs (as in [*Lassie*](/wiki/Lassie)), dolphins ([*Flipper*](/wiki/Flipper_(1964_TV_series))), horses ([*The Black Stallion*](/wiki/The_Black_Stallion)) or even other great apes ([*King Kong*](/wiki/King_Kong)), chimpanzee characters and actions are rarely relevant to the plot.[[67]](#cite_note-67)

### Portrayals in science fiction[[edit](/index.php?title=(none)&action=edit&section=26)]

The rare depictions of chimpanzees as individuals rather than stock characters, and as central rather than incidental to the plot[[67]](#cite_note-67) are generally found in works of [science fiction](/wiki/Science_fiction). [Robert A. Heinlein's](/wiki/Robert_A._Heinlein) [short story](/wiki/Short_story) "[Jerry Was a Man](/wiki/Jerry_Was_a_Man)" (1947) centers on a [genetically enhanced](/wiki/Biological_uplift) chimpanzee suing for better treatment. The 1972 film [*Conquest of the Planet of the Apes*](/wiki/Conquest_of_the_Planet_of_the_Apes), the third sequel of [*Planet of the Apes*](/wiki/Planet_of_the_Apes_(1968_film)), portrays a futuristic revolt of enslaved apes led by the only talking chimpanzee, [Caesar](/wiki/Caesar_(Planet_of_the_Apes)), against their human masters.[[67]](#cite_note-67) This concept was revisited in the 2011 film [*Rise of the Planet of the Apes*](/wiki/Rise_of_the_Planet_of_the_Apes), again with a chimpanzee protagonist named Caesar. Another short story, "The Pope of the Chimps" by [Robert Silverberg](/wiki/Robert_Silverberg), set in the present day, shows the development of the first signs of [religiosity](/wiki/Religion) in a group of chimpanzees, much to the surprise of the humans observing them. [David Brin's](/wiki/David_Brin) [Uplift novels](/wiki/Uplift_universe) present a future in which humans have "[uplifted](/wiki/Biological_uplift)" chimpanzees (and certain other species) with human-level [sapience](/wiki/Sapience).

## See also[[edit](/index.php?title=(none)&action=edit&section=27)]

[Template:Portal](/wiki/Template:Portal) [Template:Div col](/wiki/Template:Div_col)

* [Prostitution among animals#Chimpanzees](/wiki/Prostitution_among_animals#Chimpanzees)
* [Chimp Haven](/wiki/Chimp_Haven)
* [Chimpanzee genome project](/wiki/Chimpanzee_genome_project)
* [Dian Fossey](/wiki/Dian_Fossey)
* [Great ape personhood](/wiki/Great_ape_personhood)
* [Jane Goodall](/wiki/Jane_Goodall)
* [List of apes](/wiki/List_of_apes)
* [Bili ape](/wiki/Bili_ape)

[Template:Div col end](/wiki/Template:Div_col_end)

## Notes[[edit](/index.php?title=(none)&action=edit&section=28)]

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

## References[[edit](/index.php?title=(none)&action=edit&section=29)]

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

* Pickrell, John. (September 24, 2002). ["Humans, Chimps Not as Closely Related as Thought?"](http://news.nationalgeographic.com/news/2002/09/0924_020924_dnachimp.html). *National Geographic.*

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

## Further reading[[edit](/index.php?title=(none)&action=edit&section=30)]

* [Hawks, John](/wiki/John_D._Hawks). ["How Strong Is a Chimpanzee?"](http://www.slate.com/id/2212232/) [*Slate*](/wiki/Slate_(magazine)), February 25, 2009.

## External links[[edit](/index.php?title=(none)&action=edit&section=31)]

[Template:Wikiquote](/wiki/Template:Wikiquote) [Template:Wikispecies](/wiki/Template:Wikispecies)

* [Template:Commons-inline](/wiki/Template:Commons-inline)
* [Template:Cite Americana](/wiki/Template:Cite_Americana)
* [Template:Cite EB1911](/wiki/Template:Cite_EB1911)
* Stanford, Craig B. [The Predatory Behavior and Ecology of Wild Chimpanzees](http://www-rcf.usc.edu/~stanford/chimphunt.html) university of Southern California. 2002(?)
* [ChimpCARE.org](http://www.chimpcare.org/)
* [Template:UCSC genomes](/wiki/Template:UCSC_genomes)

[Template:Hominidae nav](/wiki/Template:Hominidae_nav) [Template:Apes](/wiki/Template:Apes) [Template:Phylo](/wiki/Template:Phylo) [Template:Evolution](/wiki/Template:Evolution) [Template:Authority control](/wiki/Template:Authority_control)

[Category:Chimpanzees](/wiki/Category:Chimpanzees) [Category:Apes](/wiki/Category:Apes) [Category:Articles containing video clips](/wiki/Category:Articles_containing_video_clips) [Category:Megafauna of Africa](/wiki/Category:Megafauna_of_Africa) [Category:Extant Pliocene first appearances](/wiki/Category:Extant_Pliocene_first_appearances) [Category:Primates of Africa](/wiki/Category:Primates_of_Africa) [Category:Tool-using mammals](/wiki/Category:Tool-using_mammals)

[ln:Mokómbósó](/wiki/Ln:Mokómbósó) [nn:Sjimpanse](/wiki/Nn:Sjimpanse) [th:ลิงชิมแปนซี](/wiki/Th:ลิงชิมแปนซี)