[Template:Distinguish](/wiki/Template:Distinguish" \o "Template:Distinguish) [Template:Hatnote](/wiki/Template:Hatnote) [Template:Use dmy dates](/wiki/Template:Use_dmy_dates) [Template:Automatic Taxobox](/wiki/Template:Automatic_Taxobox) The **Hominidae** ([Template:IPAc-en](/wiki/Template:IPAc-en)), whose members are known as **great apes**<ref group=note>"Great ape" is a common name rather than a taxonomic label, and there are differences in usage. It may or may not include humans.</ref> or **hominids**, are a taxonomic [family](/wiki/Family_(biology)) of primates that includes seven [extant](/wiki/Extant_taxon) species in four [genera](/wiki/Genus): [*Pongo*](/wiki/Pongo_(genus)), the [Bornean](/wiki/Bornean_orangutan) and [Sumatran orangutan](/wiki/Sumatran_orangutan); [*Gorilla*](/wiki/Gorilla), the [eastern](/wiki/Eastern_gorilla) and [western gorilla](/wiki/Western_gorilla); [*Pan*](/wiki/Pan_(genus)), the [common chimpanzee](/wiki/Common_chimpanzee) and the [bonobo](/wiki/Bonobo); and [*Homo*](/wiki/Homo), the [human](/wiki/Human) and near-human ancestors and relatives (e.g., the [Neanderthal](/wiki/Neanderthal)).<ref name=MSW3/>

Several revisions in classifying the great apes have caused the use of the term **"hominid"** to vary over time. Its original meaning referred only to humans (*Homo*) and their closest relatives. That restrictive meaning has now been largely assumed by the term **"hominin"**, which comprises all members of the human clade after the split from the chimpanzees (*Pan*). (*See* below, for a fuller discussion of related and very similar terms, at [Terminology](/wiki/#Terminology).) The current, 21st-century meaning of "hominid" refers to all the great apes including humans. Usage still varies, however, and some scientists and laypersons still use "hominid" in the original restrictive sense; the scholarly literature generally shows the traditional usage until around the turn of the 21st century.

Within the taxon Hominidae, a number of extant and known extinct, that is, fossil, genera are grouped with the humans, chimpanzees, and gorillas in the subfamily [Homininae](/wiki/Homininae); others with orangutans in the subfamily [Ponginae](/wiki/Ponginae) (see [classification graphic](/wiki/#Homgraph) below). The [most recent common ancestor](/wiki/Most_recent_common_ancestor) of all Hominidae lived roughly 14 million years ago,<ref name=Hill&Ward1988>[Template:Cite journal](/wiki/Template:Cite_journal)</ref> when the ancestors of the orangutans speciated from the ancestral line of the other three genera.[[1]](#cite_note-1) Those ancestors of the family Hominidae had already speciated from the family [Hylobatidae](/wiki/Hylobatidae) (the gibbons), perhaps 15 million to 20 million years ago.[[1]](#cite_note-1)[[2]](#cite_note-2)

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

[Template:See also](/wiki/Template:See_also) [Template:Human timeline](/wiki/Template:Human_timeline)[Template:Life timeline](/wiki/Template:Life_timeline) [thumb|left|](/wiki/File:Man_of_the_woods.JPG)[Sumatran orangutan (*Pongo abelii*)](/wiki/Sumatran_orangutan) In the early [Miocene](/wiki/Miocene), about 22 million years ago, there were many species of arboreally adapted primitive [catarrhines](/wiki/Catarrhini) from East Africa; the variety suggests a long history of prior diversification. Fossils at 20 million years ago include fragments attributed to [*Victoriapithecus*](/wiki/Victoriapithecus), the earliest Old World monkey. Among the genera thought to be in the ape lineage leading up to 13 million years ago are [*Proconsul*](/wiki/Proconsul_(genus)), [*Rangwapithecus*](/wiki/Rangwapithecus), [*Dendropithecus*](/wiki/Dendropithecus), [*Limnopithecus*](/wiki/Limnopithecus), [*Nacholapithecus*](/wiki/Nacholapithecus), [*Equatorius*](/wiki/Equatorius), [*Nyanzapithecus*](/wiki/Nyanzapithecus), [*Afropithecus*](/wiki/Afropithecus), [*Heliopithecus*](/wiki/Heliopithecus), and [*Kenyapithecus*](/wiki/Kenyapithecus), all from East Africa.

At sites far distant from East Africa, the presence of other generalized non-[cercopithecids](/wiki/Cercopithecoidea), that is, non-monkey primates, of middle Miocene age—[*Otavipithecus*](/wiki/Otavipithecus) from cave deposits in Namibia, and [*Pierolapithecus*](/wiki/Pierolapithecus) and [*Dryopithecus*](/wiki/Dryopithecus) from France, Spain and Austria—is further evidence of a wide diversity of ancestral ape forms across Africa and the Mediterranean basin during the relatively warm and equable climatic regimes of the early and middle Miocene. The most recent of these far-flung Miocene apes ([hominoids](/wiki/Hominoids)) is [*Oreopithecus*](/wiki/Oreopithecus), from the fossil-rich coal beds in northern Italy and dated to 9 million years ago.

Molecular evidence indicates that the lineage of [gibbons](/wiki/Gibbon) (family [Hylobatidae](/wiki/Hylobatidae)), the [lesser apes](/wiki/Lesser_apes), diverged from that of the great apes some 18–12 million years ago, and that of [orangutans](/wiki/Orangutan) (subfamily Ponginae) diverged from the other great apes at about 12 million years. There are no fossils that clearly document the ancestry of gibbons, which may have originated in a still-unknown South East Asian hominoid population; but fossil proto-orangutans, dated to around 10 million years ago, may be represented by [*Sivapithecus*](/wiki/Sivapithecus) from India and [*Griphopithecus*](/wiki/Griphopithecus) from Turkey.[[3]](#cite_note-3) [thumb|150px|left|A reconstruction of a female](/wiki/File:Lucy-reconstruction.jpg) [*Australopithecus afarensis*](/wiki/Australopithecus_afarensis) ([National Museum of Natural History](/wiki/National_Museum_of_Natural_History)) Species close to the last common ancestor of gorillas, chimpanzees and humans may be represented by [*Nakalipithecus*](/wiki/Nakalipithecus) fossils found in Kenya and [*Ouranopithecus*](/wiki/Ouranopithecus) found in [Greece](/wiki/Greece). Molecular evidence suggests that between 8 and 4 million years ago, first the gorillas (genus *Gorilla*), and then the chimpanzees (genus *Pan*) split off from the line leading to the humans. Human DNA is approximately 98.4% identical to that of chimpanzees when comparing single nucleotide polymorphisms (see [human evolutionary genetics](/wiki/Human_evolutionary_genetics)). The fossil record, however, of gorillas and chimpanzees is limited; both poor preservation—rain forest soils tend to be acidic and dissolve bone—and [sampling bias](/wiki/Sampling_bias) probably contribute most to this problem.

Other [hominins](/wiki/Hominins) probably adapted to the drier environments outside the African equatorial belt; and there they encountered antelope, hyenas, elephants and other forms becoming adapted to surviving in the East African [savannas](/wiki/Savannas), particularly the regions of the [Sahel](/wiki/Sahel) and the [Serengeti](/wiki/Serengeti). The wet equatorial belt contracted after about 8 million years ago, and there is very little fossil evidence for the divergence of the hominin lineage from that of gorillas and chimpanzees—which split was thought to have occurred around that time. The earliest fossils argued by some to belong to the human lineage are *Sahelanthropus tchadensis* (7 Ma) and *Orrorin tugenensis* (6 Ma), followed by *Ardipithecus* (5.5–4.4 Ma), with species *Ar. kadabba* and *Ar. ramidus*.

### Taxonomic history[[edit](/index.php?title=(none)&action=edit&section=2)]

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

[thumb|right|](/wiki/File:Akha_cropped_hires.JPG) [Humans](/wiki/Human) are one of the four [extant](/wiki/Extant_taxon) hominid genera. The classification of the great apes has been [revised several times](/wiki/History_of_hominoid_taxonomy) in the last few decades; these revisions have led to a varied use of the word "**hominid**" over time. The original meaning of the term referred to only humans and their closest relatives—what is now the modern meaning of the term "[hominin](/wiki/Hominin)". And the meaning of the [taxon](/wiki/Taxon) Hominidae changed gradually, leading to a different (modern) usage of "hominid" that today includes all the great apes including humans.

The term **hominid** is easily confused with a number of very similar words:

* A **hominoid**, commonly called an ape, is a member of the superfamily [Hominoidea](/wiki/Ape): extant members are the [gibbons](/wiki/Gibbon) (lesser apes, family [Hylobatidae](/wiki/Hylobatidae)) and the **hominids** (the great apes, family Hominidae).
* A **hominine** is a member of the subfamily [Homininae](/wiki/Homininae): gorillas, chimpanzees, and humans (excludes [orangutans](/wiki/Orangutan)).
* A **hominin** is a member of the subtribe [Hominina](/wiki/Hominina) of the tribe [Hominini](/wiki/Hominini): that is, modern humans and their closest relatives *after* their split from chimpanzees.
* A **human** is a member of the genus [*Homo*](/wiki/Homo_(genus)), of which [*Homo sapiens*](/wiki/Homo_sapiens) is the only [extant species](/wiki/Extant_species), and within that [*Homo sapiens sapiens*](/wiki/Anatomically_modern_humans) is the only surviving [subspecies](/wiki/Subspecies).

(*See* below, a graphic of the taxonomic classifications at [Evolutionary tree of the Hominoidea](/wiki/#Classification).)

Many scientists, including [paleoanthropologists](/wiki/Paleoanthropologist), continue to use the term "hominid" to mean humans and their direct and near-direct bipedal [ancestors](/wiki/Ancestors).

#### Extant and fossil relatives of humans[[edit](/index.php?title=(none)&action=edit&section=4)]

[thumb|right|A model of a modern](/wiki/File:Caucasian_Human_Skull.jpg) [human](/wiki/Human) [hominid skull](/wiki/Hominid_skull) (or [hominin](/wiki/Hominin) skull) [thumb|left|A](/wiki/File:Fossil_hominids.jpg) [fossil](/wiki/Fossil) hominid exhibit at [The Museum of Osteology](/wiki/The_Museum_of_Osteology), [Oklahoma City, Oklahoma](/wiki/Oklahoma_City)

As mentioned, **Hominidae** was originally the name given to the family of humans and their (extinct) close relatives, with the other [great apes](/wiki/Great_ape) (that is, the orangutans, gorillas, and chimpanzees) all being placed in a separate family, the [Pongidae](/wiki/Pongidae). However, that definition eventually made Pongidae [paraphyletic](/wiki/Paraphyletic) because at least one great ape species (the chimpanzees) proved to be more closely related to humans than to other great apes. Most taxonomists today encourage [monophyletic](/wiki/Monophyletic) groups—this would require, in this case, the use of Pongidae to be restricted to just one closely related grouping. Thus, many [biologists](/wiki/Biologist) now assign *Pongo* (as the *sub*family [Ponginae](/wiki/Ponginae)) to the family Hominidae. The taxonomy shown here follows the monophyletic groupings according to the modern understanding of human and great ape relationships.

Humans and close relatives including the tribes [Hominini](/wiki/Hominini) and [Gorillini](/wiki/Gorillini) form the subfamily [Homininae](/wiki/Homininae) (see classification graphic below). (A few researchers go so far as to refer the [chimpanzees](/wiki/Chimpanzees) and the gorillas to the genus *Homo* along with humans.) [[4]](#cite_note-4)[[5]](#cite_note-5)[[6]](#cite_note-6) But, it is those fossil relatives more closely related to humans than the chimpanzees that represent the especially close members of the human family, and without necessarily assigning subfamily or tribal categories.[[7]](#cite_note-7) Many extinct hominids have been studied to help understand the relationship between modern humans and the other extant hominids. Some of the extinct members of this family include [*Gigantopithecus*](/wiki/Gigantopithecus), [*Orrorin*](/wiki/Orrorin), [*Ardipithecus*](/wiki/Ardipithecus), [*Kenyanthropus*](/wiki/Kenyanthropus), and the [australopithecines](/wiki/Australopithecine) [*Australopithecus*](/wiki/Australopithecus) and [*Paranthropus*](/wiki/Paranthropus).[[8]](#cite_note-8) The exact criteria for membership in the tribe Hominini under the current understanding of human origins are not clear, but the taxon generally includes those [species](/wiki/Species) that share more than 97% of their [DNA](/wiki/DNA) with the modern human [genome](/wiki/Genome), and exhibit a capacity for [language](/wiki/Language) or for simple [cultures](/wiki/Culture) beyond their 'local family' or band. The [theory of mind](/wiki/Theory_of_mind) concept—including such faculties as empathy, attribution of mental state, and even empathetic deception—is a controversial criterion; it distinguishes the adult human alone among the hominids. Humans acquire this capacity after about four years of age, whereas it has not been proven (nor has it been disproven) that gorillas or chimpanzees ever develop a theory of mind.[[9]](#cite_note-9) This is also the case for some [New World monkeys](/wiki/New_World_monkey) outside the family of great apes, as, for example, the [capuchin monkeys](/wiki/Capuchin_monkey#Theory_of_mind).

However, even without the ability to test whether early members of the Hominini (such as [*Homo erectus*](/wiki/Homo_erectus), [*Homo neanderthalensis*](/wiki/Neanderthal), or even the australopithecines) had a theory of mind, it is difficult to ignore similarities seen in their living cousins. Orangutans have shown the development of culture comparable to that of chimpanzees,[[10]](#cite_note-10) and some[Template:Who](/wiki/Template:Who) say the orangutan may also satisfy those criteria for the [theory of mind](/wiki/Theory_of_mind) concept. These scientific debates take on political significance for advocates of [great ape personhood](/wiki/Great_ape_personhood).

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

#### Evolutionary tree[[edit](/index.php?title=(none)&action=edit&section=6)]

[Template:Anchor](/wiki/Template:Anchor)[none|frame|Evolutionary tree of the](/wiki/File:Hominidae_chart.svg) [Hominoidea](/wiki/Hominoidea) (emphasis on family Hominidae): after an initial separation from the main line by the [Hylobatidae](/wiki/Hylobatidae) (gibbons) some 18 million years ago, the line of [Pongidae](/wiki/Pongidae) broke away, leading to the orangutan; later, the Hominidae split into the tribes [Hominini](/wiki/Hominini) and [Gorillini](/wiki/Gorillini). [Template:Anchor](/wiki/Template:Anchor)

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

[thumb|right|Skulls of an orangutan and a gorilla](/wiki/File:Orang.gorilla.skulls.jpg) [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* There are seven living species of great ape which are classified in four [genera](/wiki/Genus). The following classification is commonly accepted:<ref name=MSW3/>

* **Family Hominidae**: humans and other great apes; extinct genera and species excluded<ref name=MSW3/>
  + Subfamily [Ponginae](/wiki/Ponginae)
    - Tribe [Pongini](/wiki/Pongini)
      * Genus [*Pongo*](/wiki/Orangutan)
        + [Bornean orangutan](/wiki/Bornean_orangutan), *Pongo pygmaeus*

*Pongo pygmaeus pygmaeus*

*Pongo pygmaeus morio*

*Pongo pygmaeus wurmbii*

* + - * + [Sumatran orangutan](/wiki/Sumatran_orangutan), *Pongo abelii*
  + Subfamily [Homininae](/wiki/Homininae)
    - Tribe [Gorillini](/wiki/Gorillini)
      * Genus [*Gorilla*](/wiki/Gorilla)
        + [Western gorilla](/wiki/Western_gorilla), *Gorilla gorilla*

[Western lowland gorilla](/wiki/Western_lowland_gorilla), *Gorilla gorilla gorilla*

[Cross River gorilla](/wiki/Cross_River_gorilla), *Gorilla gorilla diehli*

* + - * + [Eastern gorilla](/wiki/Eastern_gorilla), *Gorilla beringei*

[Mountain gorilla](/wiki/Mountain_gorilla), *Gorilla beringei beringei*

[Eastern lowland gorilla](/wiki/Eastern_lowland_gorilla), *Gorilla beringei graueri*

* + - Tribe [Hominini](/wiki/Hominini)
      * Subtribe [Panina](/wiki/Chimpanzee)
        + Genus [*Pan*](/wiki/Chimpanzee)

[Chimpanzee](/wiki/Common_chimpanzee) (common chimpanzee), *Pan troglodytes*

[Central chimpanzee](/wiki/Central_chimpanzee), *Pan troglodytes troglodytes*

[Western chimpanzee](/wiki/Western_chimpanzee), *Pan troglodytes verus*

[Nigeria-Cameroon chimpanzee](/wiki/Nigeria-Cameroon_chimpanzee), *Pan troglodytes ellioti*

[Eastern chimpanzee](/wiki/Eastern_chimpanzee), *Pan troglodytes schweinfurthii*

[Bonobo](/wiki/Bonobo) (pygmy chimpanzee), *Pan paniscus*

* + - * Subtribe [Hominina](/wiki/Hominina)
        + Genus [*Homo*](/wiki/Homo_(genus))

[Human](/wiki/Homo_sapiens), *Homo sapiens*

[Anatomically modern human](/wiki/Anatomically_modern_human), *Homo sapiens sapiens*

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

[thumb|right|A reconstruction of](/wiki/File:Pierolapithecus_catalaunicus_(Pau)_a_l'Institut_Català_de_Paleontologia_Miquel_Crusafont.JPG) [*Pierolapithecus catalaunicus*](/wiki/Pierolapithecus) [thumb|right|Replica of](/wiki/Image:Paranthropus_boisei_skull.jpg) [the skull sometimes known as "Nutcracker Man"](/wiki/OH_5), found by [Mary Leakey](/wiki/Mary_Leakey). In addition to the extant species and subspecies, [archaeologists](/wiki/Archaeologists), [paleontologists](/wiki/Paleontologists), and [anthropologists](/wiki/Anthropologists) have discovered and classified numerous extinct great ape species as below, based on the taxonomy shown.[[11]](#cite_note-11) **Family Hominidae**

* [*Graecopithecus*](/wiki/Graecopithecus) (?=[*Ouranopithecus*](/wiki/Ouranopithecus)*)*[†](/wiki/†) (placement debated)
  + *Graecopithecus freybergi* (?=*Ouranopithecus macedoniensis*)
* [*Otavipithecus*](/wiki/Otavipithecus)[†](/wiki/†)
  + *Otavipithecus namibiensis*
* [*Morotopithecus*](/wiki/Morotopithecus)[†](/wiki/†)
  + *Morotopithecus bishopi*
* Subfamily [Ponginae](/wiki/Ponginae)[[12]](#cite_note-12)\*\* Tribe [Lufengpithecini](/wiki/Lufengpithecus) [†](/wiki/†)
  + - [*Lufengpithecus*](/wiki/Lufengpithecus)
      * *Lufengpithecus lufengensis*
      * *Lufengpithecus keiyuanensis*
      * *Lufengpithecus hudienensis*
  + Tribe Sivapithecini[†](/wiki/†)
    - [*Ankarapithecus*](/wiki/Ankarapithecus)
      * *Ankarapithecus meteai*
    - [*Sivapithecus*](/wiki/Sivapithecus)
      * *Sivapithecus brevirostris*
      * *Sivapithecus punjabicus*
      * *Sivapithecus parvada*
      * *Sivapithecus sivalensis*
      * *Sivapithecus indicus*
    - [*Gigantopithecus*](/wiki/Gigantopithecus)
      * *Gigantopithecus bilaspurensis*
      * *Gigantopithecus blacki*
      * *Gigantopithecus giganteus*
  + Tribe Pongini
    - [*Khoratpithecus*](/wiki/Khoratpithecus)[†](/wiki/†)
      * [*Khoratpithecus ayeyarwadyensis*](/wiki/Khoratpithecus_ayeyarwadyensis)
      * [*Khoratpithecus piriyai*](/wiki/Khoratpithecus_piriyai)
      * [*Khoratpithecus chiangmuanensis*](/wiki/Khoratpithecus_chiangmuanensis)
    - [*Pongo*](/wiki/Orangutan) (orangutans)
      * [*Pongo hooijeri*](/wiki/Pongo_hooijeri)[†](/wiki/†)
* Subfamily [Homininae](/wiki/Homininae)[[13]](#cite_note-13)[[14]](#cite_note-14)\*\* [*Pierolapithecus*](/wiki/Pierolapithecus)[†](/wiki/†)
  + - *Pierolapithecus catalaunicus*
  + [*Udabnopithecus*](/wiki/Udabnopithecus)[†](/wiki/†)
    - *Udabnopithecus garedziensis*
  + Tribe [Dryopithecini](/wiki/Dryopithecini) [†](/wiki/†)
    - [*Oreopithecus*](/wiki/Oreopithecus) (placement disputed)
      * *Oreopithecus bambolii*
    - [*Nakalipithecus*](/wiki/Nakalipithecus)
      * *Nakalipithecus nakayamai*
    - [*Anoiapithecus*](/wiki/Anoiapithecus)
      * *Anoiapithecus brevirostris*
    - [*Hispanopithecus*](/wiki/Hispanopithecus)
      * *Hispanopithecus laietanus*
      * *Hispanopithecus crusafonti*
    - [*Dryopithecus*](/wiki/Dryopithecus)
      * [*Dryopithecus wuduensis*](/wiki/Dryopithecus_wuduensis)
      * [*Dryopithecus fontani*](/wiki/Dryopithecus_fontani)
      * [*Dryopithecus brancoi*](/wiki/Dryopithecus_brancoi)
      * *Dryopithecus laietanus*
      * *Dryopithecus crusafonti*
  + [*Rudapithecus*](/wiki/Rudapithecus)[†](/wiki/†)
    - *Rudapithecus hungaricus*
  + [*Samburupithecus*](/wiki/Samburupithecus)[†](/wiki/†)
    - *Samburupithecus kiptalami*
  + Tribe [Gorillini](/wiki/Gorillini)
    - [*Chororapithecus*](/wiki/Chororapithecus) [†](/wiki/†) (placement debated)
      * *Chororapithecus abyssinicus*
  + Tribe [Hominini](/wiki/Hominini)
    - [*Sahelanthropus*](/wiki/Sahelanthropus)[†](/wiki/†)
      * *Sahelanthropus tchadensis*
    - [*Orrorin*](/wiki/Orrorin)[†](/wiki/†)
      * *Orrorin tugenensis*
    - Subtribe [Hominina](/wiki/Hominina)
      * [*Ardipithecus*](/wiki/Ardipithecus)[†](/wiki/†)
        + *Ardipithecus ramidus*
        + *Ardipithecus kadabba*
      * [*Kenyanthropus*](/wiki/Kenyanthropus)[†](/wiki/†) (placement debated)
        + *Kenyanthropus platyops*
      * [*Praeanthropus*](/wiki/Praeanthropus)[†](/wiki/†)[[15]](#cite_note-15)\*\*\*\*\* [*Praeanthropus bahrelghazali*](/wiki/Australopithecus_bahrelghazali)
        + [*Praeanthropus anamensis*](/wiki/Australopithecus_anamensis)
        + [*Praeanthropus afarensis*](/wiki/Australopithecus_afarensis)
      * [*Australopithecus*](/wiki/Australopithecus)[†](/wiki/†)
        + [*Australopithecus africanus*](/wiki/Australopithecus_africanus)
        + [*Australopithecus garhi*](/wiki/Australopithecus_garhi)
        + [*Australopithecus sediba*](/wiki/Australopithecus_sediba)
        + [*Australopithecus deyiremeda*](/wiki/Australopithecus_deyiremeda)
      * [*Paranthropus*](/wiki/Paranthropus)[†](/wiki/†)
        + [*Paranthropus aethiopicus*](/wiki/Paranthropus_aethiopicus)
        + [*Paranthropus robustus*](/wiki/Paranthropus_robustus)
        + [*Paranthropus boisei*](/wiki/Paranthropus_boisei)
      * [*Homo*](/wiki/Homo_(genus)) – immediate ancestors of modern [humans](/wiki/Human)
        + [*Homo gautengensis*](/wiki/Homo_gautengensis)[†](/wiki/†)
        + [*Homo rudolfensis*](/wiki/Homo_rudolfensis)[†](/wiki/†)
        + [*Homo naledi*](/wiki/Homo_naledi)[†](/wiki/†)
        + [*Homo habilis*](/wiki/Homo_habilis)[†](/wiki/†)
        + [*Homo floresiensis*](/wiki/Homo_floresiensis)[†](/wiki/†)
        + [*Homo erectus*](/wiki/Homo_erectus)[†](/wiki/†)
        + [*Homo ergaster*](/wiki/Homo_ergaster)[†](/wiki/†)
        + [*Homo antecessor*](/wiki/Homo_antecessor)[†](/wiki/†)
        + [*Homo heidelbergensis*](/wiki/Homo_heidelbergensis)[†](/wiki/†)
        + [*Homo cepranensis*](/wiki/Homo_cepranensis)[†](/wiki/†)
        + [*Homo helmei*](/wiki/Homo_helmei)[†](/wiki/†)
        + [*Homo palaeojavanicus*](/wiki/Meganthropus)[†](/wiki/†)
        + [*Homo tsaichangensis*](/wiki/Homo_tsaichangensis)[†](/wiki/†)
        + [Denisovans](/wiki/Denisova_hominin) (scientific name has not yet been assigned)[†](/wiki/†) [*Homo neanderthalensis*](/wiki/Neanderthal)[†](/wiki/†)
        + [*Homo rhodesiensis*](/wiki/Homo_rhodesiensis)[†](/wiki/†)
        + [*Homo sapiens*](/wiki/Homo_sapiens)

[*Homo sapiens idaltu*](/wiki/Homo_sapiens_idaltu)[†](/wiki/†)

[*Archaic Homo sapiens*](/wiki/Archaic_Homo_sapiens) ([Cro-Magnon](/wiki/Cro-magnon))[†](/wiki/†)

[Red Deer Cave people](/wiki/Red_Deer_Cave_people) [†](/wiki/†) (scientific name has not yet been assigned; perhaps a race of modern humans or a hybrid[[16]](#cite_note-16) of modern humans and Denisovans<ref name=NG>[Template:Cite web](/wiki/Template:Cite_web)</ref>)

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

The great apes are large, tailless primates, with the smallest living species being the [bonobo](/wiki/Bonobo) at 30–40 kilograms in weight, and the largest being the eastern gorillas, with males weighing 140–180 kilograms. In all great apes, the males are, on average, larger and stronger than the females, although the degree of [sexual dimorphism](/wiki/Sexual_dimorphism) varies greatly among species. Although most living species are predominantly [quadrupedal](/wiki/Quadrupedal), they are all able to use their hands for gathering food or nesting materials, and, in some cases, for tool use.<ref name=EoM>[Template:Cite book](/wiki/Template:Cite_book)</ref>

Most species are [omnivorous](/wiki/Omnivore),[Template:Citation needed](/wiki/Template:Citation_needed) but fruit is the preferred food among all but some human groups. Chimpanzees and orangutans primarily eat fruit. When gorillas run short of fruit at certain times of the year or in certain regions, they resort to eating shoots and leaves, often of [bamboo](/wiki/Bamboo), a type of grass. Gorillas have extreme adaptations for chewing and digesting such low-quality forage, but they still prefer fruit when it is available, often going miles out of their way to find especially preferred fruits. Humans, since the [neolithic revolution](/wiki/Neolithic_revolution), consume mostly [cereals](/wiki/Cereal) and other [starchy](/wiki/Starch) foods, including increasingly highly [processed foods](/wiki/Food_processing), as well as many other [domesticated plants](/wiki/Domestication#Plants) (including fruits) and [meat](/wiki/Meat). Hominid teeth are similar to those of the [Old World monkeys](/wiki/Old_World_monkey) and [gibbons](/wiki/Gibbon), although they are especially large in gorillas. The [dental formula](/wiki/Dentition) is [Template:DentalFormula](/wiki/Template:DentalFormula). Human teeth and jaws are markedly smaller for their size than those of other apes, which may be an adaptation to eating cooked food since the end of the [Pleistocene](/wiki/Pleistocene).<ref name=Brace&Mahler>[Template:Cite journal](/wiki/Template:Cite_journal)</ref><ref name=Wrangham2007>[Template:Cite book](/wiki/Template:Cite_book)</ref>

[thumb|](/wiki/File:Gorilla_019.jpg)[Gorilla](/wiki/Gorilla) [Gestation](/wiki/Gestation) in great apes lasts 8–9 months, and results in the birth of a single offspring, or, rarely, twins. The young are born helpless, and they must be cared for long periods of time. Compared with most other mammals, great apes have a remarkably long adolescence, not being [weaned](/wiki/Weaning) for several years, and not becoming fully mature for eight to thirteen years in most species (longer in humans). As a result, females typically give birth only once every few years. There is no distinct breeding season.<ref name = EoM/>

The gorillas and the common chimpanzee live in family groups of around five to ten individuals, although much larger groups are sometimes noted. Chimpanzees live in larger groups that break up into smaller groups when fruit becomes less available. When small groups of female chimpanzees go off in separate directions to forage for fruit, the dominant males can no longer control them and the females often mate with other subordinate males. In contrast, groups of gorillas stay together regardless of the availability of fruit. When fruit is hard to find, they resort to eating leaves and shoots. Because gorilla groups stay together, the male is able to monopolize the females in his group. This fact is related to gorillas' greater sexual dimorphism than chimpanzees'. In both chimpanzees and gorillas, the groups include at least one dominant male, and females leave the group at maturity.

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

Due to the close genetic relationship between humans and other great apes, certain [animal rights](/wiki/Animal_rights) organizations, such as the [Great Ape Project](/wiki/Great_Ape_Project), argue that nonhuman [great apes are persons](/wiki/Great_ape_personhood) and should be given basic [human rights](/wiki/Human_rights). Some countries have instituted a [research ban](/wiki/Great_ape_research_ban) to protect great apes from any kind of scientific testing.

On June 25, 2008, the Spanish parliament supported a new law that would make "keeping apes for circuses, television commercials or filming" illegal.[[17]](#cite_note-17) On September 8, 2010, [European Union](/wiki/European_Union) [banned the testing of great apes](/wiki/Great_ape_research_ban).[[18]](#cite_note-18)