

Great  
Apes  
Survival  
Project



[www.unep.org/grasp/](http://www.unep.org/grasp/)

GRASP

Projet  
pour la  
survie  
des  
grands  
singes

*Pan paniscus* ◀

▶ **Bonobo**

*Contents*

|                                      |   |
|--------------------------------------|---|
| Taxonomy .....                       | 2 |
| Distribution .....                   | 2 |
| Anatomy and Appearance .....         | 3 |
| Size, Weight and Lifespan.....       | 3 |
| Gestation .....                      | 3 |
| Predators and Natural Enemies .....  | 3 |
| Habitat.....                         | 3 |
| Ecology and Behavior .....           | 3 |
| Population Sizes and Trends .....    | 3 |
| Threats to the Populations .....     | 4 |
| Conservation .....                   | 4 |
| References and Further Reading ..... | 5 |
| Further sources on the Internet..... | 5 |

Text compiled by Swen C. Renner

## Taxonomy

Scientific name: *Pan paniscus*

English Name: Bonobo, Pygmy or Dwarf Chimpanzee, sometimes also Gracile Chimpanzee

Nom Français: bonobo, chimpanzé pygmée, chimpanzé gracile

One species, formerly merged with the Common Chimpanzee *Pan troglodytes*. No subspecies recognized. There is significant overlap in size between the Chimpanzee and the Bonobo, but the latter is more gracile in build, with a smaller, rounder skull, and a flatter face with less-prominent brow ridges. The Bonobo, like the Chimpanzee, is a highly social animal and can exist in large groups (see Ecology and Behavior). Bonobo communities contrast with chimpanzees' in that females are socially dominant and maintain strong bonds with other females. No formal subspecies are currently recognized within the Bonobo.

## Distribution

The bonobo is found only in one range state, the Democratic Republic of Congo (DRC). It has a relatively wide but markedly discontinuous distribution in the central Congo basin, south of the Congo River. It occurs in forests around the Lomami River, the Kasai-Sankuru Rivers, and in the Lake Tumba-Lac Ndombe region, although it appears to be absent from the central part of this area between the Momboyo River and the Busira River. It had been thought that the species' range was continuous within this large forest zone, totaling approximately 350,000 km<sup>2</sup>, but field observations since the 1970s indicate that it is absent or rare in many areas and common only in a few scattered localities. Studies in the last decade have confirmed viable populations near the towns of Befale, Djolu, Bokungu and Ikela, and in a 3,000 km<sup>2</sup> area between the Yekokora and Lomako Rivers. The range does not overlap with *Pan troglodytes* (Figure 1).

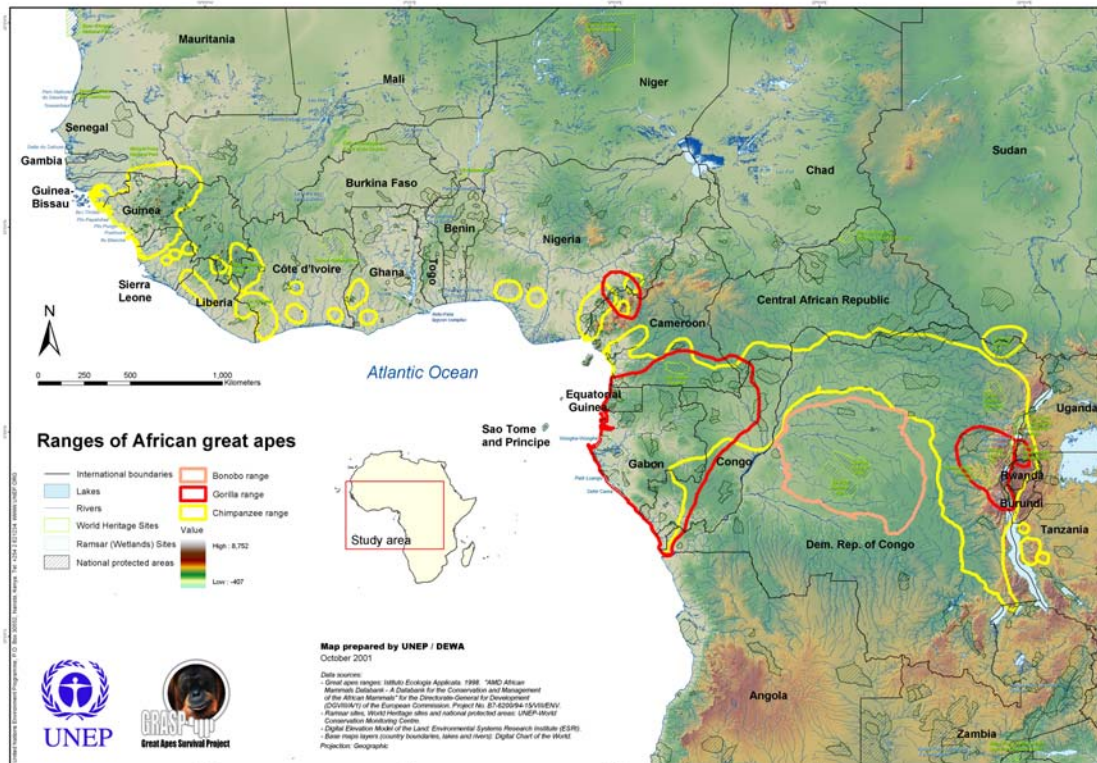


Figure 1: Distribution of bonobos. Source: UNEP

## Anatomy and Appearance

Similar to Common Chimpanzee *Pan troglodytes*, but smaller and more gracile. Compared to the common chimpanzee, the body weight of the bonobo is proportioned differently; the centre of gravity is lower, making it possible for the bonobo to stand more erect and walk bipedally (on two feet). Bonobos have longer limbs (relative to trunk length) and their build is generally more slender and graceful than chimpanzees. The lanky body structure of the bonobo is thought to be an adaptation for climbing and living an arboreal (living in the trees) lifestyle in the rainforest. The head and ears of bonobos are noticeably smaller, and there is less brow mass over the eyes than characteristic of chimpanzees. The facial skin is darkly pigmented, and the hair is black, usually parted in the middle of the head with bushy sideburns on both sides of the face. The bonobo's vocalisations are high-pitched squeals.

Because of the similar morphological traits (physical appearance) between Bonobos and humans, some anthropologists consider the Bonobo to be the best living prototype for the common ancestor of humans. While this controversy is unresolved, it has been established through molecular genetic analyses that the chimpanzee genus, *Pan*, is most closely related to humans (*Homo*) and shares approximately 98% genetic identity.

## Size, Weight and Lifespan

Males:           38 kg       120 cm  
Females:        30 kg       100 cm  
Lifespan: 60 years in captivity, unknown for the wild.

## Gestation

7.5-8 months. Bonobos start with reproduction at 7-10 years in captivity, and at about 12-14 years old in the wild. Ability to reproduce ceases with c. 40 years. As the other great apes, reproduction is limited by age and slow. Bonobos need a long time to recover their population size once diminished.

## Predators and Natural Enemies

Humans. No other enemies reported yet.

## Habitat

Tropical lowland rainforests of the Congo Basin forest edges and clearings.

## Ecology and Behavior

Bonobos are essentially frugivorous, but are known to eat insects and hunt small mammals occasionally. Bonobos also have been observed to slap water up from a stream and eat either invertebrates or fish. Certain aspects of bonobo social organization differ from the chimpanzee and other great apes. Bonobos are most frequently found in mixed age and sex groups with adults, juveniles and infants of both sexes freely associating with each other. Groups reach numbers of 100 individuals and occupy territories with up to 70 km<sup>2</sup>, but mostly both group sizes and territories are smaller. Large groups are divided into subgroups of up to 10 individuals. There is a less pronounced dominance hierarchy in the bonobo's social structure. Unique among great apes, bonobos display a greater prevalence of strong female-female bonding as opposed to the predominance of male-male bonding observed in common chimpanzees. One special feature observed in bonobo society is the low level of aggression between individual Bonobos. Their generally peaceful society is attributed to the evolution of a highly complex social system. Groups of bonobos range from about 50-100 individuals. Contrasting to the other great apes, a bonobo group is always lead by a female (alpha) and her sons have the highest ranks beyond the males.

## Population Sizes and Trends

No clear and trustworthy estimates are given and the population sizes are ranging from 5,000 to 50,000 (Butynski 2000, Thompson-Handler et al. 1995). No data from fieldwork available, except report of 75% decline in Lomako population since 1998 (Ammann et al. 2002). All population estimates have got to be treated with extreme caution and are more a guess than a scientific based fact.



Early speculative estimates of Bonobo numbers suggested a total population of between 100,000 and 200,000 in the overall range. Other early estimates based on Bonobo numbers at field study sites suggested a total population of between 10,000 and 20,000. Taking into account the fragmented distribution and recent impacts on the species, it has been suggested that present numbers are likely to be close to the lower end of this range, or below. Given a lack of comprehensive and precise numerical population data, estimates of extinction risk are to a great extent based on observed loss or modification of chimpanzee habitats, on rates of exploitation, and also, on the risks inherent in a small range size. The Species Survival Commission of the World Conservation Union (IUCN) categorized the bonobo as **Endangered** in 2000, i.e. facing a very high risk of extinction in the wild in the near future.

### Threats to the Populations

Habitat loss, poaching, and commercial bushmeat. Also infectious diseases like the Ebola virus and others.

### Conservation

The low and steadily declining population qualifies the bonobos as critically endangered.

Several organizations worldwide with different aims try to prevent the bonobo populations from extinction.

Habitat destruction is by far the greatest threat to the bonobo. Commercial logging, conversion of their forest habitat to agricultural land for cash crops and subsistence farming, mineral prospecting, mining, and forest fires, compounds this. Progressive habitat loss often leaves small and unconnected patches in which chimp and bonobo populations are isolated and at risk from chance demographic factors.

Development of logging or mining operations invariably extends new access routes into undisturbed habitat, with a marked increase in hunting of animals for bushmeat, often followed by conversion for agriculture. Deforestation is far advanced in West Africa, where only remnant tracts of primary rain forest persist. The fragmented populations of the eastern and western subspecies of Common Chimpanzee are primarily located in remnant forest, game reserves and national parks, but unauthorized hunting, logging, mining and farming are common in many nominally protected areas.

The bonobo occurs in Salonga National Park, Democratic Republic of the Congo (a World Heritage site), but civil war and increased hunting affect this area; elsewhere Bonobos occur in a locally managed wildlife sanctuary in the Lukuru area of DRC. The status of bonobo populations is unlikely to be known until there is a lasting peace in DRC, because currently the front line between opposing factions runs through the center of the species' range.

Hunting of adults for bushmeat has a disproportionate impact on populations because of both species' slow reproductive rate. Bushmeat is often a major source of dietary protein in West and Central Africa, and although ape-meat forms no more than 1-2% of the meat consumed or traded, it may be favored in some areas for its perceived magical or medicinal benefits. Although subsistence hunting may have once been at sustainable levels, it increases with logging and mining because food is required to maintain large labor forces, because colonizing human communities often favor bushmeat, and because modern transport systems enable access to distant urban markets.

Bonobos appear particularly sensitive to disturbance, and are liable to move away from increasing contact with humans, and are particularly vulnerable to hunting with firearms.

The live animal trade, including capture of infants for the pet trade and entertainment industry, and the international biomedical trade, are additional pressures. Although much concern has in the past been expressed over such uses and the possible impact on wild populations, in itself this is far less a threat than the killing of adults for bushmeat and progressive habitat loss.

Bonobos are listed on Appendix I of the 1973 Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), and trade in individuals or products is therefore subject to strict regulation by ratifying nations. Trade for primarily commercial purposes is banned. Law throughout their ranges protects the species, although enforcement is usually poor to non-existent. They are listed in Class A of the African Convention (1969), which prohibits the hunting or capture of the species unless in the national interest or for scientific purposes.



## References and Further Reading

- Ape Alliance (1998) The African Bushmeat trade – a recipe for extinction. Ape Alliance, London.
- Butynski TM (2001) Africa's Great Apes. Pp. 3-56 in Beck BB, Stoinski TS, Hutchins M, Maple TL, Norton B, Rowan A, Stevens EF, Arluke A (eds.). Great Apes and Humans: the ethics of coexistence. Smithsonian Institution Press, Washington and London.
- de Waal FBM (1982) Chimpanzee Politics: Sex and Power Among the Apes. Harper and Row.
- de Waal FBM (1988) The communicative repertoire of captive Bonobos (*Pan paniscus*) compared to that of Chimpanzees. Behaviour 106: 183-251.
- de Waal FBM (1989) Peacemaking Among Primates. Harvard University Press.
- de Waal FBM (1989) Peacemaking among primates. Harvard University Press.
- de Waal FBM, Lanting F (1998) Bonobo: The Forgotten Ape. University of California Press.
- GRASP Meeting, Cameroon. (2003). Draft map prepared for working purposes at the GRASP Meeting, Cameroon, Annotations added at the meeting by experts (hand-drawn). 18-20, March 2003.
- Heltne P, Marquardt LA (1989) Understanding Chimpanzees. Harvard University Press.
- Kano T (1992) The last ape: Pygmy Chimpanzee behavior and ecology. Stanford University Press.
- Leach M (1996) The Great Apes: Our Face in Nature's Mirror, New York: Sterling Publishing Co.
- Lindsey J (2001) The Great Apes. MetroBooks.
- Llewellyn C (2001) Great Apes. Hodder Wayland.
- Napier JR, Napier PH (1985) The natural history of the primates. The MIT Press Cambridge, Massachusetts.
- National Geographic Society (1993) The Great Apes: Between Two Worlds Photos and essays by Michael Nichols.
- Peterson D, Ammann K, Museveni JK (2003) Eating apes. University of California Press.
- Savage-Rumbaugh ES, Shanker S, Taylor TJ (1998) Apes, Language, and the Human Mind. Oxford University Press.
- Singer P (1990) Animal Liberation. Random House Inc., New York, New York.
- Strier K (1999) Primate Behavior and Ecology. Freeman & Company.
- Susman RL (1984) The Pygmy Chimpanzee: evolutionary biology and behavior. Plenum Press.
- Taylor B (2002) Great Apes. Southwater Publishing. Reading level: Ages 9-12
- Wrangham R, McGrew WC, de Waal FBM Heltne P (1994) Chimpanzee cultures. Harvard University Press.

## Further sources on the Internet

- The Bonobo Page (<http://williamcalvin.com/teaching/bonobo.htm>)
- African Wildlife Foundation (<http://www.awf.org/wildlives/149>)
- UNEP – World Conservation Monitoring Centre (<http://www.unep-wcmc.org/>)
- Primate Info Net – PIN ([www.primat.wisc.edu/pin/](http://www.primat.wisc.edu/pin/))