



Chimpanzee Exploration

Updated February 2021

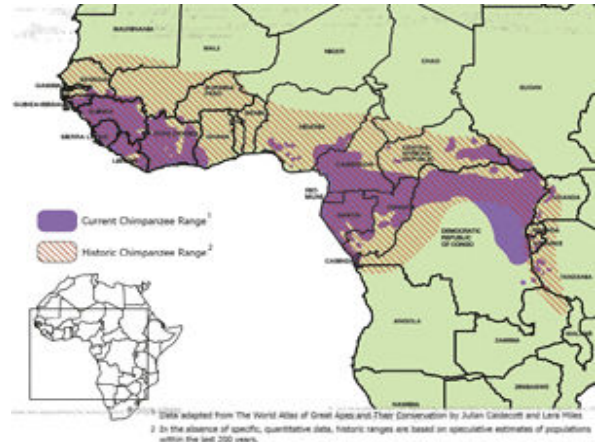
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Chimpanzee Natural History

Natural History

Common chimpanzees belong to the Order Primates, the Family Hominidae, the genus *Pan* and the species *troglodytes*. Chimpanzees share the *Pan* genus with the pygmy chimpanzee, more commonly known as the bonobo (*Pan paniscus*). Chimpanzees are classified as great apes, along with humans, bonobos, gorillas, and orangutans. The lesser apes are gibbons and siamangs.

Chimpanzees are humans' closest living ancestor, sharing roughly 98.7% of their DNA with ours. Our last common ancestor with chimpanzees existed approximately 5-6 million years ago in equatorial Africa.



Geographic Distribution and Population

In the early 1900s, 1-2 million chimpanzees were living across equatorial Africa. However, human population growth has had a devastating impact on wild chimpanzee populations. Today there may be fewer than 250,000 chimpanzees living in the wild. Chimpanzees currently live in 21 African countries, referred to as “range countries,” with the largest populations concentrated into just four nations. Chimpanzees occupy a variety of habitats from tropical rainforests to montane forests, swamps, savannas, and open woodlands.

Chimpanzee Biology & Behavior

Physical Description

Chimpanzees' bodies are covered in coarse black to brown hair, but have a bare face, fingers, palms of hands, toes, and soles of feet. Chimpanzees have unique faces and can easily be individually identified. At birth, their faces are pale but the skin typically darkens with age until it is brown or black in appearance. Like other non-human primates, chimpanzees have opposable (grasping) thumbs and big toes. Chimpanzees do not have a tail, which is a feature that distinguishes apes from monkeys.

Captive chimpanzees are larger and heavier than wild chimpanzees, probably due to differences in nutrition. Female chimpanzees in the wild typically weigh less than 100 lbs, but in captivity may weigh 125 lbs or more. Male chimpanzees in the wild weigh 100-125 lbs but may weigh up to 150-175 lbs or more in captivity.

Locomotion

Chimpanzees typically walk or run on all four limbs (quadrupedal), bearing weight on the knuckles of their hands, known as knuckle-walking. Chimpanzees are also capable of walking upright (bipedal). They are also excellent climbers and can move through their habitat by using their arms to swing from place to place, a movement called brachiation. While this is a wild chimps favorite way to get around, we have not yet seen our chimps brachiating in their habitat.

Social Structure

Chimpanzees live in multi-male, multi-female, multi-generational communities that range considerably in size based on the availability of resources, typically from 20 to 150 individuals. Chimpanzees have a social structure referred to as “fission-fusion”, in which members of the community generally break off into subgroups called “parties.” Parties spend their time traveling, eating, resting, and socializing together, and the composition of parties is fluid and changes frequently.

Chimpanzees in the wild live in a male-bonded, or “philopatric” society in which the males remain in the community where they were born and develop strong relationships with each other. Females, on the other hand, may migrate to neighboring communities when they reach sexual maturity to avoid inbreeding. Wild chimpanzee communities are male-dominated and adhere to a very strict linear hierarchy with a clear alpha male. Captive chimpanzees, on the other hand, may have a more fluid hierarchy, with females at times exerting more dominance.

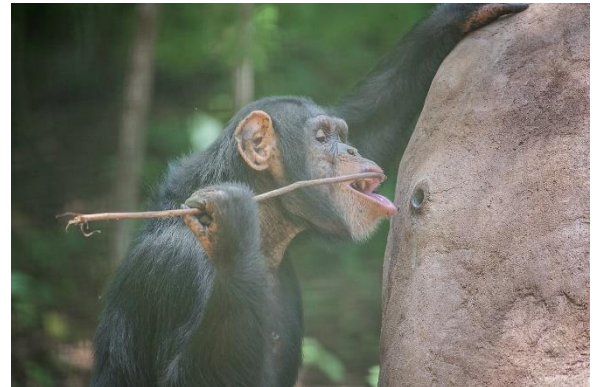
Diet

Chimpanzees are omnivores, meaning they have a varied diet that includes plants and animals, but are predominantly frugivorous, meaning that they prefer to eat fruits. This makes chimpanzees omnivorous frugivores. In the wild, fruit, particularly wild figs, comprises 50-60% of their diet. Chimpanzees spend almost 70% of their time foraging or looking for food. Here at Project Chimps the caregivers will put food throughout their habitat to encourage this natural behavior. Chimpanzees also eat nuts, leaves, roots, insects, and small mammals, including monkeys. Cooperative hunting and sharing of meat are important social activities in many chimpanzee communities. Chimpanzees self-medicate by ingesting soil or particular plants to prevent or treat parasites or disease.

Tool Use and Culture

Until the 1960s, human beings were believed to be the only species to make and use tools. Dr. Jane Goodall was the first to scientifically document that chimpanzees make and use tools, when she observed chimpanzees modifying sticks to “fish” for termites. Since that time, other chimpanzee populations have been observed making and using various tools, including rocks and anvils for cracking nuts, leaves for sponging water, and spears for killing small mammals.

Tool use, as well as other behaviors, varies from community to community. Young chimpanzees learn what to eat, how to make and use particular tools, and other behaviors, from observing and learning from their mothers, siblings, and other elders in the community. As a result, chimpanzee communities have their own unique cultures just as humans do. A culture is composed of distinct behaviors that are passed down from generation to generation.



Loretta uses a stick to extract honey from the termite mound. *Crystal Alba/Project Chimps*

Understanding and Using Chimpanzee Behavior and Communication

Chimpanzees use vocalizations, facial expressions, gestures, and other forms of body language to communicate. These elements are typically combined when a chimpanzee communicates with others. For example, when chimpanzees play, they usually have “play faces,” laugh, and use exaggerated body movements, like slapping their feet on the ground or bowing deeply. Behaviors and vocalizations may also be used in different contexts to express different meanings. For example, pant-hoots are used in displays of dominance, as well as to express general excitement, such as the arrival of or discovery of food.

Vocalizations and Sound Production

Affiliative (Friendly/Neutral)

- *Panting*: Breathy panting, with or without an open mouth is a common friendly vocalization in chimpanzees. It is used in many contexts, including greetings and during grooming.
- *Laughter*: Chimpanzee laughter is not the same as human laughter. It is similar to panting, but often has a louder, coarser sound and may vary in pitch. Chimpanzees primarily laugh during playing and tickling.
- *Food Grunts*: Chimpanzees produce a variety of sharp grunts or barks when they see food. Food grunts vary in volume and pitch depending on the food in question. More desirable foods often elicit louder and higher pitched food grunts or barks.
- *Raspberry*: Raspberries, or the “Bronx cheer,” are produced by pursing lips and forcing air through them with a buzzing sound. Raspberries are commonly used by captive chimpanzees, but less often heard in wild populations. Chimpanzees use raspberries in a variety of contexts, such as to get human attention, during grooming sessions, or just prior to or during a display.
- *Lip smacking and teeth clacking*: Chimpanzees make various sounds before and during grooming, possibly to indicate their friendly intentions to grooming partners. They often work their tongues and lips together to make a soft smacking sound or clack their teeth together audibly.
- *Pant-Hoot*: The pant-hoot is a series of pants (inhalations) alternating with hoots (“hoo” on exhalation) that escalate in volume, pitch, and speed, typically followed by a loud, climactic “wraah!” vocalization. Pant-hoots are used for displays, greetings, and long-distance communication. If chimps pant-hoot in greeting to you, pant-hoot with them, in a chorus. If a chimp pant-hoots as part of a display towards you, do not pant-hoot back, or you may be perceived as challenging them.

Facial Expressions

Like vocalizations, chimpanzee facial expressions are rich and varied. Some facial expressions that are commonly seen are:

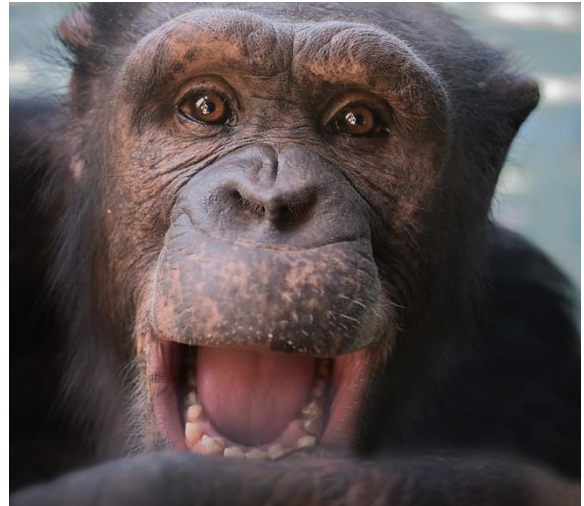
Affiliative (Friendly/Neutral)

- *Smile*: Chimpanzees typically only expose their bottom teeth while smiling. The lower jaw may also be slightly dropped. Smiles are often done in conjunction with panting and/or head bobbing.
- *Play Face*: A play face is an exaggerated smile, in which the mouth is wide open, typically with the bottom teeth



Collin smiles in the habitat. Notice his relaxed lower lip exposing only his lower teeth. *Crystal Alba/Project Chimps*

exposed and top teeth covered, although the top teeth may be exposed. Play faces may be accompanied by panting, laughing, and exaggerated head bobbing.



Jacob exhibits a play face. Notice how only his bottom teeth are exposed. *Crystal Alba/Project Chimps*

Non-Affiliative (Threatening)

- *Fear grimace*: Similar to a human smile, a fear grimace is when both the top and bottom teeth are exposed. It is typically an indication of distress in a chimpanzee, although it can indicate extreme excitement. Fear grimaces may be silent or accompanied by a squeal or scream.
- *Pursed/puffed lips*: If a chimpanzee presses his or her lips tightly together, and puffs a bit of air under them, s/he may be feeling tense or anxious. The chimp's hair may also be standing on end (see piloerection in the Body Language section below).
- *Open mouth, bared teeth*: A wide open mouth, lips retracted, and all teeth exposed typically indicates aggression or extreme fear, or both. This facial expression is typically accompanied by a scream.



Charisse with an open mouth, bared teeth expression. *Crystal Alba/Project Chimps*



Gertrude running in the habitat with a fear grimace. Notice how both rows of teeth are exposed. *Crystal Alba/Project Chimps*

Threats to Populations

Chimpanzees are an endangered species and face a number of serious and significant threats to their future survival. The continued decline of chimpanzee populations is impacted by a number of factors, primarily caused by humans:

- *Habitat loss*: Deforestation due to increasing human populations, development, logging, mining, and agriculture has resulted in significant loss of suitable chimpanzee habitat. As a result, many chimpanzee populations are isolated, live outside of protected areas, and come into frequent contact and conflict with humans.
- *Poaching*: In many areas, chimpanzees are illegally hunted for “bushmeat,” i.e. the meat of free-living, non-domesticated wildlife. Once a sustainable practice by hunter-gatherer societies, bushmeat is now often procured and sold commercially in urban areas at an unsustainable level. Chimpanzees may be specifically hunted or may be injured or killed in traps meant for other species. Chimpanzees may also be poached due to conflict with humans. For example, some chimpanzee populations will raid crops in order to survive, putting them at odds with their human neighbors.
- *Illegal pet/exhibition trade*: The procurement of chimpanzee infants is often a byproduct of the bushmeat trade. Too small to provide a useful amount of meat, infants may be sold locally or smuggled overseas to be kept as pets or exhibited in zoos. Due to the stress of watching their mothers die, inadequate nutrition, exposure to human diseases, and the rigors of travel, many infants do not survive. It is thought that for every infant illegally sold on the black market, at least ten other chimpanzees have perished.
- *Disease*: Diseases found naturally in forested areas (such as Ebola) and diseases introduced by humans (influenza, polio, etc.) can have devastating effects on chimpanzee populations.



(Image source: <https://www.livescience.com/27692-deforestation.html>)

US citizens and citizens of other so-called industrialized nations are often a driving force behind the activities that contribute to the continued loss of chimpanzees and their habitat. Our consumer choices have a direct effect on the future of chimpanzees. Among the products that contribute to the decline of chimpanzees include wood products (logging), electronics (mining of elements used in computers and cell phones), cigarettes, and products containing palm oil and its derivatives (agriculture).

History of Chimpanzees in Captivity

Chimpanzees have been held in captivity in the United States for more than a century. First used primarily for exhibition (zoos), entertainment (circuses, film) and the pet trade, chimpanzees became increasingly popular as scientific research subjects from the 1920s onward. In the 1950s and 1960s, large numbers of wild-born chimpanzees were imported into the United States. By 1976, the practice of importing wild-born chimpanzees into the US ceased with the creation of the Endangered Species Act. Wild chimps became endangered and were no longer legally allowed to be removed from the wild. Captive chimps were declared threatened and could still be used in labs and captivity. Institutions housing chimpanzees shifted their focus to captive breeding to allow the continued use of chimpanzees in exhibition, the entertainment industry, pet trade, and scientific research. Not coincidentally, the first sanctuaries appeared around this time, largely to provide homes for adult chimpanzees who were no longer safe to use in entertainment or as pets.

Increasing opposition to the use of chimpanzees in medical research, entertainment, and the pet trade developed in the 1990s, and led to a number of strategic efforts in public awareness, legislation, and sanctuary creation. As a result of these efforts, the use of chimpanzees in biomedical research has ceased, and the use of chimpanzees in entertainment and as pets is rapidly declining. Professional sanctuaries like Project Chimps have been established to meet the need for lifetime care for chimpanzees from these industries.

Scientific Research

Captive chimpanzees have been the subjects of medical, psychological, and behavioral research since the 1920s, when psychologist Robert Yerkes established a primate research laboratory at Yale University. In the late 1950s and early 1960s, the US Air Force used chimpanzees as research subjects for the United States space program, to test the potential effects of space travel. Once space travel was deemed safe for humans, chimpanzees became increasingly popular subjects of biomedical research, and several laboratories housing chimpanzees were established across the country. Chimpanzees were used as subjects in disease research (such as hepatitis, malaria, and respiratory syncytial virus), toxicity testing, and experimental surgeries, as well as non-medical research on behavior, cognition, and language.

Entertainment

Chimpanzees have been used in the United States as entertainers for decades. They have performed in circuses, television shows, movies, advertisements, and appeared dressed in clothing on greeting cards and calendars. Chimpanzees in the entertainment industry are typically under the age of eight years old, due to the strength and potential danger posed by older juveniles and adult chimpanzees. Taken from their mothers at birth, chimpanzee entertainers have very brief careers. When they become too strong to handle and can no longer generate income for the trainer, former entertainment chimpanzees may end up as breeders for the entertainment industry or the pet trade, in zoos or in sanctuaries. Some former entertainment chimps were sent to research laboratories.

The use of chimpanzees in entertainment has sharply declined since 2005, due in part to animal protection advocates protesting the use and abuse of chimpanzees in the entertainment industry, as well as advances in computer-generated imagery (CGI) that have replaced the use of trained chimpanzees. Some chimpanzee trainers have retired their chimpanzees to sanctuaries due to the decrease in demand for chimpanzee entertainers. As of 2020, 11 chimpanzees are known to remain in the entertainment industry.

Exhibition

Chimpanzees have been exhibited in zoological institutions in the US for at least a century. Zoos argue that such exhibition is necessary and beneficial for public education and species survival. Zoos are generally divided into two categories: zoos accredited by the Association of Zoos and Aquariums (AZA), which are typically larger city zoos that meet standards beyond those required by the Animal Welfare Act (AWA), and unaccredited zoos sometimes called “roadside zoos.” AZA accredited zoos are expected to meet particular standards for housing and care, generally maintain somewhat larger social groups, and cooperatively participate in a managed breeding program called the Species Survival Plan (SSP). Unaccredited zoos may house chimpanzees in conditions not necessarily considered suitable and may have only 1-2 chimpanzees. Do not support unaccredited zoos.

Pet Trade

Chimpanzees have been bred and kept as “pets” in the US for many decades. Breeders were able to capitalize on the appeal of chimpanzee infants—who are born weighing just 3-4 pounds and have strong “cute factor”—and sell them to unwitting individuals as surrogate children and household pets. At the height of the trade, infant chimpanzees were selling for as much as \$50,000. However, as these chimps grew, they became unmanageable as household pets. Some chimps were simply stuck in a cage, receiving the bare minimum of care; others ended up in laboratories, unaccredited zoos, or returned to their breeders. Some were placed in sanctuaries.

The Primate Sanctuary Movement

Modern sanctuaries for chimpanzees and other non-human primates are non-profit organizations that provide professional lifetime care to apes, monkeys, and prosimians in need. Sanctuaries differ from zoos in that reproduction is prohibited, public access is restricted to guided tours on a limited basis, and sanctuary residents are not bought, sold, traded, or exchanged with other institutions. Sanctuaries differ from wildlife rehabilitation centers and domestic animal shelters in that the sanctuary is a permanent, lifetime home for its residents. The residents are not expected to be released to the wild and are not candidates for adoption to another “forever home.”

Philosophy of Chimpanzee Care

At Project Chimps, the well-being of the chimpanzees is paramount.

The care of the chimpanzees should be approached with the following in mind:

- We are all here in service to the chimpanzees.
- Remember that we are guests in the chimpanzees’ home. Act like you would as a guest in any other home.
- Do your best to see the world from the chimpanzee’s point of view.
- Treat the chimpanzees the way you would want to be treated.
- Ensure that the chimpanzees have choice and self-determination.
- Strive to make every day enjoyable for each chimpanzee.