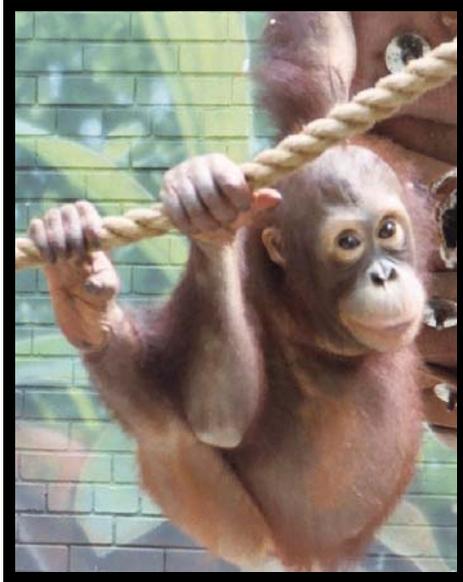


## Orangutan Key Messages

- 1) **The orangutans are the largest arboreal animals in the world, and the only arboreal great apes. They are physically well adapted to life in the trees, with feet designed for climbing and grasping to such an extent that they are often very accurately called “four-handed”.**
- Male orangutans stand approximately 4 ½ feet and attain a weight of 200 pounds, females stand approximately 3 ½ feet and weigh approximately 110 pounds.
  - All of the other great apes; gorillas, chimpanzees and bonobos, are native to Africa and primarily stay on the ground and the lower levels of trees whereas the orangutans are adapted to life in upper reaches of the forest.
  - The orangutans’ arms are 1 ½ times longer than their legs, and from finger tip to finger tip can measure as long as 8 feet.
  - The shoulder and hip joints are extremely flexible allowing each limb to move easily in any direction.
  - The feet and hands are almost identical. Orangutans’ thumbs are much shorter than those of other ape species enabling them to swing through the trees. The feet are also prehensile to aid in grasping.



2) **There are two distinct orangutan species: The Sumatran *Pongo abelii* and the Bornean *Pongo pygmaeus*. Genetically, they are as distinct from one another as lions are from tigers, or as chimpanzees are from bonobos.**

- The Sumatran and Bornean orangutan species have distinct physical differences.
- The most striking differences are the faces of the adult males. As they sexually mature the males develop large cheek flanges. The Bornean males' cheek flanges grow outward and forward of the skull, giving the face a concave shape. The Sumatran males' grow sideways rather than forward giving the face a more flattened look.
- The Sumatran orangutans tend to be lighter in color and have longer thicker hair than the Borneans.
- The Sumatrans also tend to grow longer beards and moustaches than the Borneans.



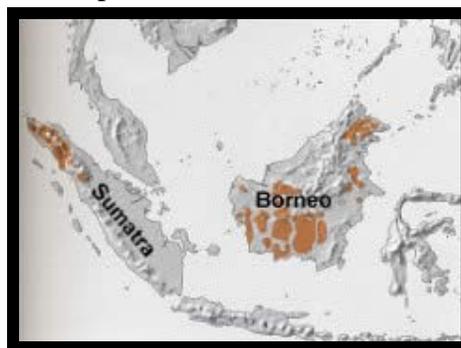
**Bornean male**



**Sumatran male**

3) **Today orangutans are found only on the islands of Sumatra and Borneo, although at one time they ranged throughout much of Southeast Asia as far north as southern China. The orangutans and the gibbons are the only apes native to Asia. All of the other apes – chimpanzees, gorillas, and bonobos – are native to central Africa.**

- The Bornean orangutans are found on the island of Borneo, which is divided between the nations of Malaysia, Indonesia and Brunei.
- The Sumatrans are found on the northern tip of the Indonesian island of Sumatra.
- Scientists estimate that there has been no gene flow between the two species for over one million years, as a result of the impenetrable geographic barrier formed by the South China Sea. This has resulted in the two species evolving to be as genetically distinct as chimpanzees are from bonobos.



**4) Orangutans primarily inhabit the middle canopy of the tropical rainforest as well as the peat swamp forest.**

- Orangutans generally utilize the middle tree canopy.
- Large tracts of mature trees are needed to sustain the species.
- It is estimated that 80% of suitable habitat in Borneo and Sumatra has been lost in the last two decades.



**5) Orangutans are considered one of the closest living relatives to humans, sharing with us 97% of the same DNA.**

- The great apes (gorillas, chimpanzees, bonobos and orangutans) along with the lesser apes (the gibbons), and humans are all considered Hominoids. DNA evidence shows all share a common ancestor.
- Differing theories exist regarding if humans are more closely related to the African great apes or the Asian orangutans. Human and orangutan teeth are strikingly similar with thicker enamel than the other ape species. Other skeletal similarities are found in orangutans and humans, which makes a compelling argument that orangutan and human ancestors are more closely related than human ancestors are to the ancestors of chimpanzees and gorillas.



**6) Orangutans have complex social relationships and are not as solitary as once believed. They are capable of forming strong social attachments.**

- Adult females with young often form short-term groups and sub-adult males often form groups with females. Young females also sometimes travel together.
- Although orangutans are capable of forming strong bonds, the fruit bearing trees they inhabit are incapable of physically supporting large groups, or of providing enough fruit to sustain large groups.



**7) The bond formed between mother and offspring is particularly strong and results in the longest childhood (up to 10 years) of any ape species. Only humans have a longer dependent childhood than orangutans.**

- Females give birth to one young who will nurse up to six years. For this reason she will not give birth again for another five to eight years.
- The offspring must learn everything from its mother in order to survive, including which fruits are ripe when, and even how to prepare certain fruits for consuming. Without an extended family or large social group, like gorillas and chimpanzees, in which a youngster can find many teachers, the orangutan needs this long childhood in order to learn all it needs from its sole teacher.
- Females are intensely protective of their young.



**8) Orangutans are primarily frugivores (fruit-eaters), but also feed on bark, leaves, nuts and invertebrates. They are highly intelligent and exhibit cognitive reasoning, create and use tools, and are able to solve problems, such as preparing certain foods before consuming.**

- The orangutan diet is highly variable throughout the seasons. Over 300 food items have been identified in their diet.
- A frugivorous lifestyle favors an ability to maintain long-term cognitive information about fruiting seasons and the locations of a dispersed resource.
- The strong enamel on orangutans' teeth allows them to crack hard nuts. Their teeth, strength and manual dexterity allows them to peel and consume certain tree barks that are not exploited by other species.
- A frugivorous lifestyle requires such dexterity as well as ingenuity to penetrate a husk or rind that can often be spiny and solidly dense.
- These fruits include jackfruit, durian, langsat, mangosteen and breadfruit.
- The orangutans' use of tools is well documented both in wild and captive populations. This includes making items to probe for food with, scratch with, cover themselves with, etc. They've also been known to use sticks to make bridges and ladders. Recent photographic evidence demonstrates that at least one individual has learned to use a stick as a spear to attempt to catch fish. Imitating human behavior with tools has also been seen in rehabilitation camps and zoos.



**9) Research has shown that orangutans have developed cultural behaviors and rituals within populations that differ between communities.**

- In 2002 the Leakey Foundation sponsored a gathering of orangutan researchers throughout the world to compare data regarding similar and differing behaviors in the various populations of orangutans they study.
- The evidence indicates that orangutans pass on behaviors developed independently to each other and their offspring.
- These findings of cultural transmission in orangutans could lead to discoveries of how culture developed in humans.



**10) Orangutans are critically endangered due to large scale habitat conversion for agriculture, especially palm oil plantations. They also suffer from the effects of large-scale logging and from the pet trade.**

- Orangutan populations have been declining for decades but the fairly recent surge in palm oil demand has greatly accelerated this rapid decline.
- Orangutans have lost more than 80% of their habitat in the last 20 years.
- It is estimated there are fewer than 60,000 orangutans left in the wild.
- Experts predict that Sumatran orangutans could be extinct in as few as ten years.
- Illegal logging and large-scale conversion of forest to agriculture in Indonesia, often accomplished through fires, is not only devastating orangutan populations but also releases enormous amounts of greenhouse gasses which contribute significantly to the global warming crisis.
- The pet trade in orangutans is still significant. It is estimated that for every baby taken, four or five die. In addition, their mothers are killed in the process and the baby, once grown and unmanageable, is often left to die in horrific conditions.



**11) The Orangutan Species Survival Plan (SSP) carefully manages and oversees all aspects of the Association of Zoos and Aquariums' (AZA's) captive population of both species of orangutan.**

- Currently there are 80 Sumatran orangutans, 88 Bornean orangutans, and 45 hybrids held in 55 AZA-member zoos.





Sources:

- Schwartz, Jeffrey H. 2004 *The Red Ape: Orangutans and Human Origins* (Westview Press)
- Beck, B (et al) 2001 *Great Apes and Humans, The Ethics of Coexistence* (Smithsonian Institution Press)
- Kaplan, G. Rogers, L 2000 *The Orangutans* (Persus Publishing)
- Leach, M. 1997 *The Great Apes, Our Face in Nature's Mirror* (Blanford)
- Smuts, B. (et al) 1986 *Primate Societies* (University of Chicago Press)
- Shaw, M., Wexo, J. 1996 *Zoobooks Orangutans* (The Knowledge Company)
- The Orangutan Conservancy [www.orangutan.com](http://www.orangutan.com)
- The Sumatran Orangutan Conservation Programme, [www.sumatranorangutan.com](http://www.sumatranorangutan.com)

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