



Orangutan

Created on Day 6 of Creation
Genesis 1:24, 25, 31

SCIENTIFIC NAMES

Order *Primates*

Family *Hominidae*

Genus *Pongo*

Species

Pongo abelii (Sumatra)

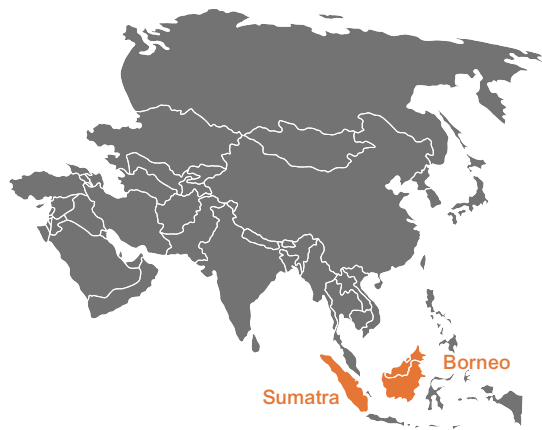
Pongo pygmaeus (Borneo)

Pongo tapanuliensis
(South Tapanuli, Indonesia)

Hold on, everyone! We are about to take a swinging adventure into the trees of Southeast Asia to meet one of the coolest creatures on the planet!

The orangutan belongs to the family *Hominidae*, along with chimpanzees and gorillas. These magnificent **primates** are often referred to as the “great apes” because they possess larger bodies and brains than their counterparts, the “lesser apes” (also known as gibbons). While secular scientists commonly classify humans as the fourth **hominid**, those with a biblical worldview would disagree.

Some historical records indicate that in the 1620s, a large African ape was named *mpongi* by the Kongo (Bantu) people. In 1798, the name “Pongo” (also its genus name) was used to describe the orangutans of Borneo.



Though many people assume the name *orangutan* has something to do with their orange color, that would be false. The term *orangutan* originates from two Malay words: *orang*, meaning “person,” and *hutan*, meaning “forest”; thus, the name literally translates to “person of the forest.”

DID YOU KNOW?

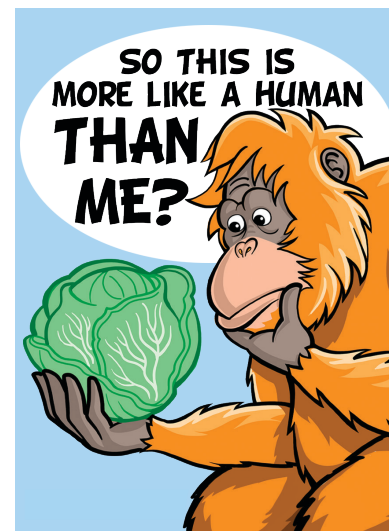


The orangutan's orange hair blends seamlessly with the dead leaves in the canopy and the muddy water below, providing surprisingly effective camouflage.

PERSON OF THE FOREST

Since the orangutan's name has been interpreted as “person of the forest,” we need to take a moment to address the glaring question... “*Did we come from apes?*” Does the fact that we share 97% of our genetic makeup with them make us related? There is so much we could delve into to provide the answers here—skull differences, hip differences, and so on. But, because we are limited by space in this zoo guide, we'll simply present the clear-cut response to the common DNA question posed above.

We share 99% of our DNA with lettuce (it's true!), but we are not a plant. A common DNA could point to a common designer as much as to evolution. The truth: as close as we may seem in some respects, the gap is unbridgeable. Orangutans simply are not humans because only we were designed in the image of God. (Gen. 1:27)



Note: For more information about the “unbridgeable gap” between apes and humans, check out our free downloadable PDFs “The March of Progress” and “Lucy Unlinked” on our free Reasons for Hope App or at store.rforh.com/collections/downloads.

DESIGNED FOR THE TREE TOPS

It would be impossible to study the orangutan and walk away from these tailless treetop travelers without being in awe of how perfectly designed they are.

Orangutans are the largest **arboreal** mammals and the heaviest tree dwellers, with males reaching heights of up to six feet and weighing approximately 220 pounds, and females typically measuring about half that size. In fact, they are actually the only Asian great apes that live in the **rainforests** and **swamp forests** on the islands of Borneo and Sumatra in Indonesia.



So, how are they designed for life in the air? We're glad you asked! Their perfect design is evident in everything from their long arms to their hook-shaped hands with long fingers, as well as their laid-back lifestyle, all of which help them conserve energy in the hot, humid rainforest. By observing their movements, we know they spend all day **foraging** in the **canopy** for their favorite foods and sleeping in its branches at night.

These particular great apes play an essential role in maintaining the health of the rainforest. How? As they swing through the trees, they snap and break off branches, creating gaps in the canopy that allow light to reach the forest floor and encourage new growth. They also disperse seeds that get trapped in their fur and feces. Perhaps these reasons are why they have earned the nickname "Gardeners of the Forest."



LIMBER & LENGTHY LIMBS

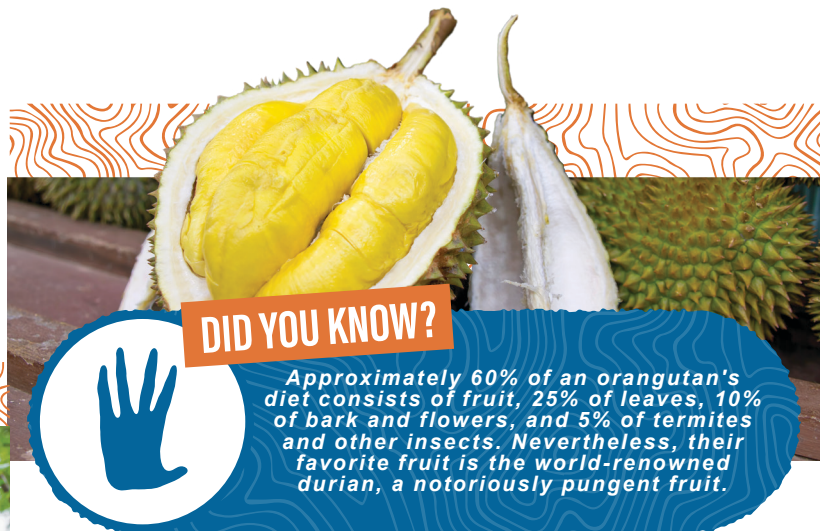
Examine the orangutan's arms and legs closely. The first thing you will notice is how long their arms are—1.5 times longer than their legs! They are so long that they can reach the ankles of an orangutan even when standing. With such long arms, it is no surprise that they have an incredible arm span of up to seven feet, fingertip to fingertip—longer than their bodies!

Due to their long arms, orangutans are exceptional climbers, capable of grabbing, reaching, and hanging for extended periods. Upon closer examination of their anatomy, we see that nearly all the bones and muscles in their shoulders, elbows, wrists, and hips are flexible, allowing them to climb and maintain their mobility and strength. This mobility enables



them to adopt extreme positions, such as doing “the splits” while grasping branches with both feet. The power possessed by these forest dwellers is seven times stronger than that of humans!

Their feet are as versatile as their hands! They can grasp, curl, stretch, and hold things. This is vital to their survival, considering they are over a hundred feet in the air for weeks at a time.



DID YOU KNOW?



Approximately 60% of an orangutan's diet consists of fruit, 25% of leaves, 10% of bark and flowers, and 5% of termites and other insects. Nevertheless, their favorite fruit is the world-renowned durian, a notoriously pungent fruit.

And how about those curved **phalanges**? Both their fingers and toes are more curved than any other living primate to serve as hooks from which to hang. This reduces bone strain and force when gripping branches. Additionally, they have very short thumbs that don't get in the way when they swing from tree to tree. Every **appendage** is flawlessly designed and serves a purpose.



Using their mouth wisely, orangutans are gifted communicators. They will warn off predators, find mates, roar, and make kissing noises as well as spit **suffused** raspberries.

DID YOU KNOW?



Orangutans typically enjoy long lifespans. In their natural arboreal habitat, they can live for 30 to 50 years; however, in captivity, a lifespan of 50 to 60 years is not uncommon.

A MARVELOUS MOUTH

In the case of the orangutan, the features aren't all in the limbs—take a look at that smile. Like humans, they have twenty baby teeth followed by thirty-two adult teeth. They have **incisors**, **canines**, **premolars**, and **molars**. But unlike us, they have a rectangular jaw to hold their larger teeth. And like all the great apes, orangutans have a **diastema**—a distinct gap between the second incisor and canine tooth on both sides.

One more unique feature of their teeth is the thick enamel, which enables them to bite and rip without sustaining damage. Orangutans' strong jaws can rip bark off trees and crack nuts, and, because climbing often involves both hands and feet, their jaws and teeth help carry things.

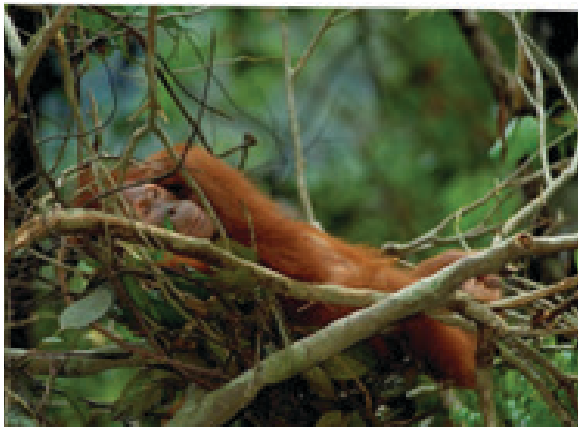
BRILLIANT BRAINS

Great apes are known for their large brains, and orangutans are no exception. Their ingenuity allows them to thrive in the treetops. Here are several examples:

- Using branches to shield their faces while raiding a hive for honey
- Using large leaves as rain hats
- Using leaves as gloves to pick up wriggling, biting insects
- Using sticks as spoons to scoop their dinner
- Using sticks as tools to extract insects or harvest seeds from hard-shelled fruit
- Chewing leaves for medicinal purposes
- Rubbing specific plants on joints to relieve aches and pains
- Demonstrating resourcefulness by sneaking and stealing anything they find, like a canoe or tools

NIFTY NESTS

An orangutan's life in the trees would not be very comfortable without its nests. These skilled engineers' nests can be found at heights of up to 100 feet and must be able to support their weight safely. To the surprise of many scientists, orangutans braid branches to create a cozy mattress and incorporate nesting materials with sharp edges on the outside to ward off predators.



In rainy weather, they may build a roof over their heads. The most astonishing part is that it takes them only about ten minutes to construct this canopy bed, where they sleep six to ten hours each night. What's most impressive is how they create a new nest every night! Sleeping high up and moving daily makes it hard for predators to track them.



DID YOU KNOW?



While they can climb, swing, and jump, orangutans cannot swim. This is understandable, as there are very few rivers that they cannot simply go over.

ORANGUTAN OFFSPRING

Orangutans are generally solitary animals that disperse and interact with one another sometimes. An exception to this is the strong bond between mother and baby. Female orangutans have the longest birth interval of any land mammal, giving birth roughly once every eight years.

After about eight months, a female orangutan moves to a nest high in the trees to give birth to a tiny, helpless three-pound infant that is completely dependent on her. While single births are most common, twins occasionally make an appearance. For the next two years, this wide-eyed little one clings to mom's chest. They then start riding on her back or spending short periods nearby, not attached.

By the age of four, they begin building their own nests, but do not become fully independent until they are seven years old. Females often remain longer and assist their mothers with their subsequent offspring, while males venture off to establish their own territories. Most orangutans do not reproduce until they are 14 years old. When we consider that a healthy orangutan mother typically has only three to four offspring in her lifetime, along with habitat loss, it becomes clear why they are critically endangered.

DID YOU KNOW?



Some male orangutans experience a surge in testosterone that allows them to develop prominent cheekbones and a throat sac, which is thought to attract females and enhance their vocalizations.



ORANGUTANS IN THE BIBLE

- No, orangutans and great apes are not explicitly mentioned by name in the Bible.
- Apes in general are mentioned alongside gold, silver, ivory, and peacocks among the precious items imported by Solomon in 1 Kings 10:22 and 2 Chronicles 9:21. Most scholars agree that the "ape" referred to is what is known as an Old-World monkey, which is one from Africa or Asia.



THINK ABOUT IT

1. We observe that an orangutan is perfectly adapted for life in the treetops. Why does living so high have its benefits? (Think of predators, natural disasters, etc.)
2. Which of the features discussed are most notable to you and why?



TRY IT FOR YOURSELF

Time for fun! Orangutans can swing through the forest easily with the help of strong arms and that seven-foot wingspan. How far can you reach fingertip to fingertip?

Materials:

- Tape measure (and a friend or family member to help you measure)
- Calculator
- The Data Chart on the next page, or recreate it on your own paper
- 4-6 people, including yourself, to get multiple arm-span measurements

PROCEDURE

1. Using a tape measure, first measure your height to the nearest inch.
2. Stretch your arms out to either side as far as they can go, and have someone else measure the distance between your fingertips.

3. Record your data in the chart.
4. Divide your height by your arm span to get the ratio between the two values.
5. Repeat this process with at least three family members (siblings, parents, and grandparents) and up to three unrelated friends.
6. Calculate the average of the ratios for your family and the average of the ratios for your friends. (Do not include yourself in these calculations.)

Record this data.

Name	(A) Height in inches	(B) Distance from fingertip to fingertip (inches)	Height divided by arm span $A \div B$	Height/arm span Ratio (in decimal form)