



A juvenile bonobo looks up at the canopy of the trees. Bonobo youngsters can have a higher status than adult males.

You have two sets of cousins in Africa. You have many traits in common with both – traits you share with one and not the other, as well as traits that are uniquely your own. You have probably

heard about your chimpanzee cousins many times before. They are relatively easy to visit, and there are lots of photos and videos. They often come up in conversation about evolution and how we came to be human.

The other cousins are more of a mystery. They live deep in the Congo Basin, in a luminous wilderness that may be the last of its kind on Earth. These cousins are shy. A long, bloody war in their country made them inaccessible for decades. But the war is over, and it is time to meet these long-lost relatives. Introducing bonobos... at long last.

“To see them for the first time was fascinating,” says Roland Hilgartner, a photographer and primatologist. “When they came down from the trees, it was impressive how big they were, how beautiful. Especially when you look into their eyes. It’s not hard to see that we are so closely related.”

To get to the bonobos, you have to charter a plane to the nearest city Djoulu, then ride for five hours on the back of a motorbike to the village of Yetee, where you must stay for at least one dinner hosted by the Bondango people, the local guardians of the forest. From there, it is another hour on foot to ▶

By Vanessa Woods Photos Roland Hilgartner

SURVIVAL of the FRIENDLIEST

Male bonobos are gentle with females, strangers are treated kindly and violence is unheard of.

Loano, the research camp named after one of the rivers that weaves through the forest.

Arriving at Loano is like stepping back in time. Dwarfed by ancient trees that shoot 30m high, simple huts are woven from whatever can be found in the forest. Washing is slung over twine to dry. There is no running water or electricity. But just outside camp, the bonobos are calling.

“I remember the females were unhappy with one of the males for some reason,” says Dr Martin Surbeck of the Max Planck Institute of Evolutionary Anthropology. Surbeck is the director of the Loana research site, and one of the world’s few bonobo experts. “They were all shouting and screaming at him. Suddenly they turned around and saw me, and decided I was the one causing trouble. All the females started shouting and screaming at me. I was scared. Really scared.”

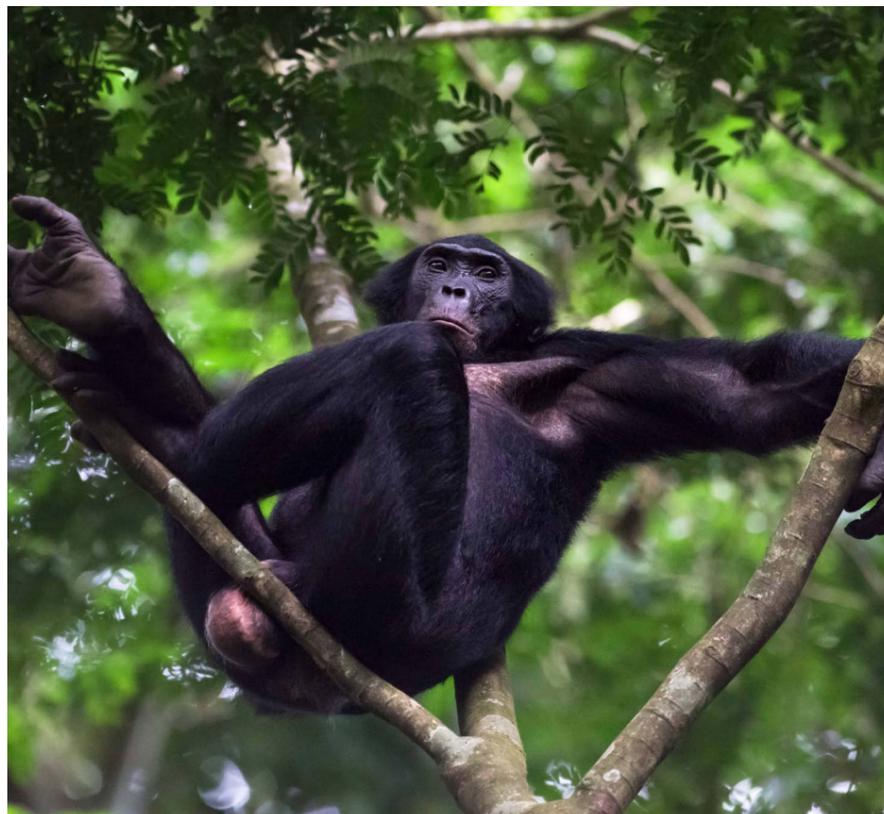
In general, females have it rough in our primate family. Chimpanzee males can be very aggressive towards a female, especially when she is sexually receptive. Males know when a female is ovulating because the pink part of her bottom swells, advertising exactly when she is most likely to conceive. All the high-ranking males attack her, beating her into submission so she will mate with them.

The female’s only defence is to stay close to the alpha male as protection. Once she has her baby, if the male loses his status, the new alpha may kill her infant. This perpetuates a cycle of violence, where aggressive males have the advantage and infanticide quickly returns nursing mothers to a reproductive state.

Female dominance

Bonobo females will have none of this kind of behaviour. They hide their ovulation with swellings that last for longer, so males cannot tell exactly when they are ovulating. Also, female bonobos can be extremely aggressive towards males who start acting like chimpanzees. Any male who tries to force females into mating is met with fierce opposition – often from a coalition of angry females. And if any male even looks at a baby the wrong way, they quickly feel the full force of female wrath. Females work together so that even though males might win in terms of size, females always win in terms of numbers.

“Female bonobos can get away with anything,” says Surbeck. “I’ve seen them pull a male’s legs right out from under him so he trips over and falls. They think this is funny.” If this sounds unorthodox – it is. There are some animals where females are dominant to males, like hyenas. But female hyenas are bigger than the males, with more muscles and more male hormones, such as testosterone. Female hyenas hunt and fight. They even



We found that bonobos would help a stranger, even when there was absolutely no reward.

A male bonobo rests in the forest canopy. He is waiting until he is granted access to a fruit tree that is occupied by females.

have pseudo-penises. But bonobo females are smaller than males. It is extremely rare for females to dominate males without a physical advantage. Even more unorthodox is how female bonobos are dominant.

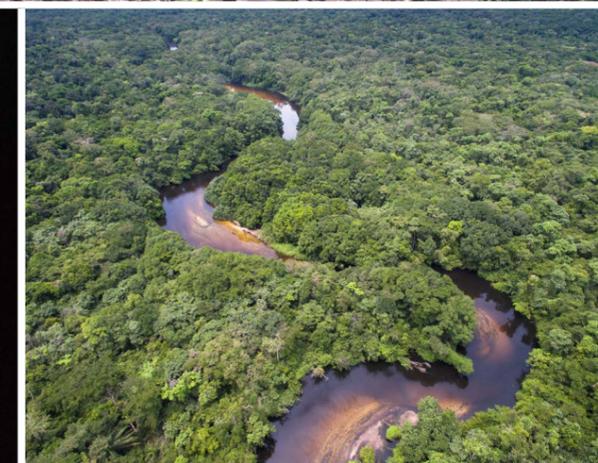
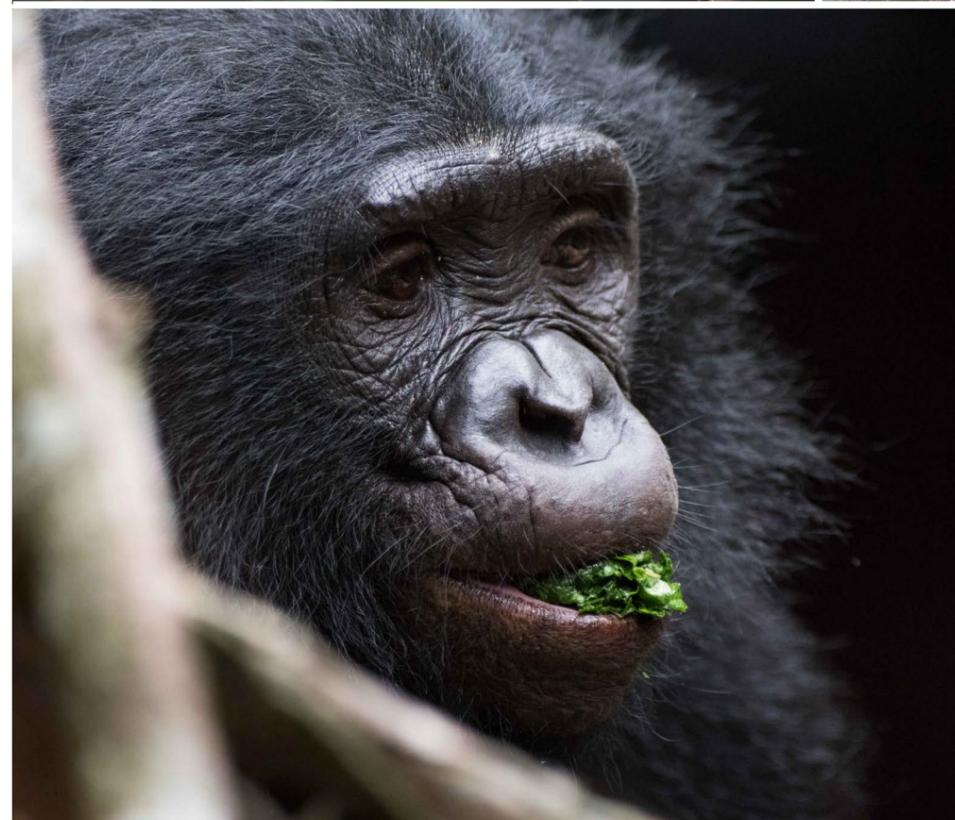
In chimpanzees, the males mostly socialise with other males. They take the best spot in the fruiting trees, leaving the females to scramble for fruit lower down. “In bonobos,” Surbeck says, “it is mostly the females who are in the best part of the tree. If a male wants to come in, he can – if his mother is there.”

The best chance of a male bonobo getting access to females is through his mother. It is his mother who introduces him to all her friends, and any new female who has arrived. Unlike chimpanzees, bonobo males do not attempt to dominate their mothers. They achieve all their status and rank through her. In fact, there are some bonobo babies who outrank adult males. And even if an adult

male is higher ranking than a baby, the male is always very well behaved.

“High ranking chimpanzee males have higher testosterone and cortisol,” says Surbeck. “In bonobo males it is the opposite. The high-ranking males have lower testosterone. They need to stay calm to stay in the centre of the group with the females. They can’t cause any trouble. You wouldn’t want to get kicked out of the tree by your mum.”

You might think that male bonobos might suffer for their unmanliness in terms of reproductive success. Surbeck certainly did. “I thought, you know, there is a lot of mating, everybody gets a little bit of a share, the males don’t fight, so the paternity would be more evenly distributed.” But when Surbeck looked at paternity, it was the opposite. The highest-ranking bonobo male – the friendliest and best-behaved – had most of the babies. As a reproductive strategy, being nice to females, ►



Clockwise from top left: a mother attends to a male infant. The young bonobo’s best friend is its mother; a group of adult females gather just before an aggressive encounter; a drone shot of the Loano bonobo research station reveals

its remoteness; bonobos often split into smaller groups during the daytime, before meeting in the evening. Grooming is important for keeping bonds between individuals; bonobos will chew leaves for medical treatment.



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Clockwise from top left: collecting urine samples; research director Dr Martin Surbeck observes bonobos; urine samples are transported.



Studying and saving wild bonobos

The bonobo research site at Lonoa was established by Dr Martin Surbeck in collaboration with the Bonobo Conservation Initiative supported by funding from the Max Planck Society. It is part of the Kokolopori Bonobo Reserve, created by the Democratic Republic of the Congo government in 2009 as a vast community-based nature reserve. Long-term field research sites such as this are crucial for conservation. “We are a constant presence in the forest,” says Surbeck. “We remove snares, discourage hunting, provide work, buy local food and provide other community benefits.” With bonobos as a flagship conservation species, other animals that were hunted out also have a chance to return.



Two youngsters share food. Research has revealed that bonobos will share food with strangers over their own kin.

Spreading the word: Lola ya Bonobo

Lola ya Bonobo is the world’s only bonobo sanctuary. Located in a beautiful sprawling forest just outside Kinshasa, the capital of the Democratic Republic of the Congo, it is not just the ‘Paradise of Bonobos’ (as its name means in Lingala) but a valuable conservation resource. Thousands of Congolese people, most of them children, visit Lola every year. Visitors learn that bonobos are an Endangered Species, and that it is illegal to hunt or capture them. When bonobos are rescued from the bushmeat trade, they are brought to Lola. Some are released back into the wild.

● Find out more at: lolayabonobo.org

kind to infants and sweet to your mum seems to work very well.

In most mammals, it is the males who leave their mother’s group and find a new community. In bonobos and chimpanzees, it is the females who immigrate. For chimpanzee females, this is the moment where they receive the most aggression from other females. The resident females of the new group attack the new female, sometimes killing her baby, if she has one. The female immigrant automatically becomes one of the lowest-ranking chimpanzees in the group. Her only choice is to seek protection from the males, who will probably direct their aggression towards her later, when she is sexually receptive.

In bonobos, an immigrant female is greeted with kindness and excitement. The other females rush towards her, compete to groom and rub genitals with her. These resident females have been seen to defend the new female against males they have known for years. Mothers have even defended new females against their own sons.

This kindness seemed to extend towards all

strangers. Our research group played a game with bonobos at the Lola ya Bonobo sanctuary (see box, p65) in Congo. Say you have \$100. There is someone in the next room, a stranger you have never met before and who you will never see. Then there is someone in the other room, who is a friend. You can either share with your friend, share with the stranger, or keep all the money. Most people usually share with their friend. It makes sense to share with someone who might return the favour later.

Acts of kindness

We played this game with bonobos, using food instead of money. The bonobo in the middle was a bonobo female called Kalina, and we gave her a pile of fruit. She could choose to unlock the door for either her friend or a stranger. Kalina opened the door to share with a stranger. Then once the stranger was in the room, the stranger opened the door for the friend, so all three bonobos could eat together.

When we ran another version of this experiment where Kalina was not even in the room with the food, she still opened the

door for the stranger, even though she did not get any food, and could not play with the stranger once the door was opened. We found that bonobos would help a stranger, even when there was absolutely no reward.

In chimpanzees, relationships between strangers are fraught with tension. As a male chimpanzee, you are more likely to be killed by a male stranger than by anything else. Bonobos have no reason to be afraid of strangers, since any scuffle that might occur is minor compared to what is seen in chimpanzees. We found that bonobos are not only non-aggressive towards strangers, they are attracted to them. This attraction allows them to help a stranger in a way we will never observe in chimpanzees.

Only last year, in the wild, bonobo researchers Barbara Fruth and Gotfried Hohmann saw something incredible. One afternoon, bonobos from the Bompusa West community met up with those from Bompusa East. The alpha male of the Bompusa West caught a small antelope. Bonobos from both communities approached him. He moved

into the crown of a tall tree, followed by nine females (four from one group, five from the other) and their offspring. For the next half an hour, he shared meat with everyone.

When anthropologist Herbert Spencer read Darwin’s *On the Origin of Species*, he coined the phrase, “survival of the fittest”. But over the years, fitness was confused with physical fitness, such as size and strength. Coupled with the observations of violence in nature, survival of the fittest came to mean that the strong would survive and the weak would perish. However, fitness is just your ability to reproduce. It was never meant to go beyond that. Bonobos have a fitness that is almost certainly unique. Where males treat females like partners, where everyone is welcoming to immigrants and kind to strangers.

“One of the most special moments was when I was taking a photograph of Izia crossing the river,” says Hilgartner. “She was standing in the river and I was standing in the river and she looked at me. She had her baby on her back, and when our eyes met, she was just so human.”

Few people take bonobos seriously. Bonobos have been celebrated and mocked as the ‘make-love-not-war’ hippie ape. They are often ignored as a freakish relative best left in the closet. But we ignore bonobos at our peril.

All females prefer males who are less aggressive. But only bonobo females have managed to turn this preference into a choice. And their choice is for tolerant males, who despite their size and strength, are still often submissive to a baby. In our large family of primates – and our even more close-knit great ape relatives – bonobos stand alone. Bonobos have escaped the lethal violence that threatens the rest of us. They do not kill each other. And that is a feat, that despite our intelligence, we have not yet managed to accomplish. ❧



VANESSA WOODS is a science writer and author of *Bonobo Handshake: A Memoir of Love and Adventure in the Congo* (Gotham Books, £12.12).

FIND OUT MORE Discover more about the Bonobo Conservation Initiative at: bonobo.org

Taking a bush plane is the only way of getting near the remote bonobos.