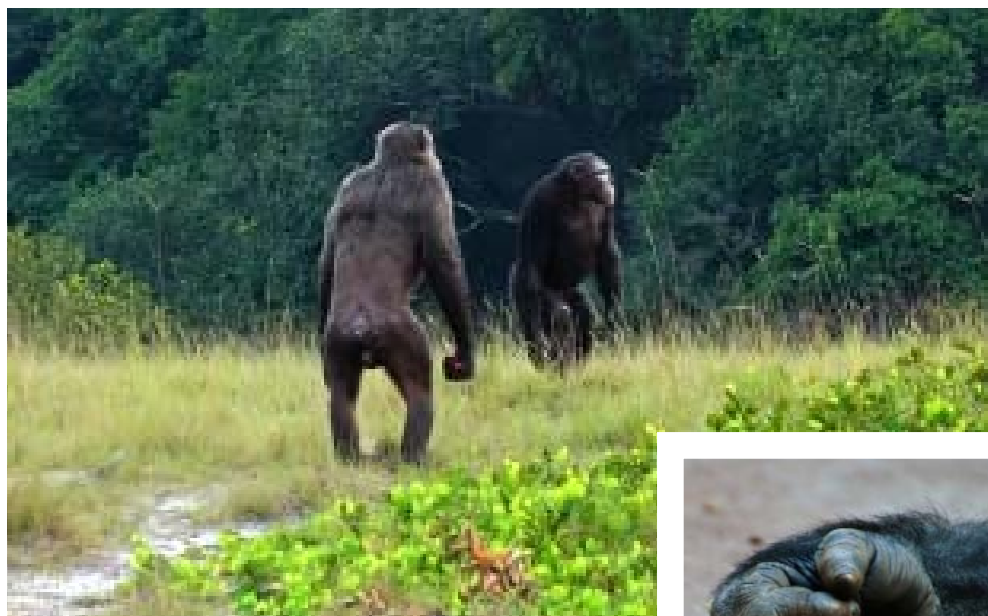


Climate change could be behind lethal chimpanzee attacks on gorillas



Attacks. Chimpanzees approach, scream, try to touch, grab, and significantly outmaneuver gorillas, mainly going after a single female gorilla with a baby (on the footage of the confrontation), which has no chance of winning. / CONTRIBUTED

Environment. Increased competition in the face of food shortages due to global warming could be causing the death of gorillas. Metro investigates the situation.

Daniel Casillas
Metro World News

The relationship between gorillas and chimpanzees in the tropical and subtropical forests of Africa has always been peaceful. However, a group of scientists has recently recorded a lethal confrontation between the two species.

“We have regularly observed both species interacting peacefully in foraging trees,” Simone Pika, a cognitive biologist at the University of Osnabrück, Germany and co-author of the research, told Metro.

It was a research team from the University of Osnabrück and the Max Planck Institute for Evolutionary Anthropology in Leipzig, Germany that first recorded lethal chimpanzee attacks on gorillas in the wild, specifically in Loango National Park in Gabon on the west coast of Central Africa.

But what exactly happened? Lara M. Southern, a PhD student and first author of the study, recalls the first observation in 2019:

“At first, we only noticed screams of chimpanzees and thought we were observing a typical encounter between individuals of neighboring chim-

“Our observations provide the first evidence that the presence of chimpanzees can have a lethal impact on gorillas.”

TOBIAS DESCHNER,
primatologist at the Max Planck Institute for Evolutionary Anthropology.



panzee communities. But then, we heard chest beats, a display characteristic for gorillas, and realized that the chimpanzees had encountered a group of five gorillas.”

During the encounters, which lasted 52 and 79 minutes, the chimpanzees formed coalitions and attacked the gorillas. The two silverbacks in the two groups and the adult females fought back and defended their young. The adults escaped, but two gorilla cubs were separated from their mothers and died.

The authors of the study suggest several explanations for the interspecies violence, including hunting and food competition:

“It could be that sharing of food resources by chimpanzees, gorillas and forest elephants in the Loango National Park results in increased competition and sometimes even in lethal interactions between the two great ape species,” Tobias Deschner, a primatologist at the Max Planck Institute for Evo-

QR CODE

Watch the confrontation:



lutionary Anthropology, said.

The experts also consider the hypothesis that the increased food competition may be due to climate change and the collapse of fruit availability, as has been observed in

other tropical forests in Gabon. However, researchers are still working to determine the cause of such clashes.

“We now want to investigate the factors triggering these surprisingly aggressive interactions,” Deschner concluded.

Metro talked with Simone Pika to learn more.

3 QUESTIONS TO...

Simone Pika,

cognitive biologist at the University of Osnabrück, Germany



1 What caused the violence between chimpanzees and gorillas?

— In our paper, we offer several explanations. For instance, chimpanzees hunt a huge variety of animal species including insects, birds, non-primate mammals, monkeys, and also reptiles. However, the observed behavior was different from those observed during hunting (for example, different vocalizations, the chimps were very loud when the infants had been killed the adult males were not interested and only one gorilla was eaten). Hence, it may be that the chimpanzees attacked the gorillas because they met in a time of very high food competition (the two events happened in two months characterized by food shortage and high overlap in feeding resources by chimpanzees and gorillas) and also significantly outnumbered the gorillas.

The observations emphasize the high cooperative potential of chimpanzees in contrast to gorillas but even if the gorillas would have collaborated better they would probably also not have a chance. The silverback of the first encounter, however, fought very hard and injured several chimpanzees.

2 Could climate change be the main cause?

— We don't know. However, scientists recently investigated the productivity of crucial feeding trees for forest elephants, gorillas and chimpanzees in the Loango NP in Gabon (ca. 200 km away) over the last 34 years and showed a significant decrease in productivity of the rainforest and hence fruiting trees. This is probably very similar in the Loango National Park resulting in increased food competition for gorillas and chimpanzees in months when fruits are scarce and food overlap between the two species is very high.

3 What's next for your research?

— We will, of course, carry on to observe the Rekambo chimpanzees during their daily interactions and might be lucky to observe more interactions with gorillas. We would also like to simultaneously monitor movement patterns and monthly dietary overlap of the two great ape species in relation to actual encounter rates and outcomes and monitor the productivity of our rainforest.

R-UP

Interspecific competition

The confrontation between two different species of animals is known as interspecific competition and can occur over territory, foraging or hunting for the same prey. Here are some examples:

many clashes have been observed between these two species for hunting the same prey in the African savannah.



Foxes and lynxes
These two species clash in the forests of the Iberian



Hyenas and lions
This is one of the best-known examples, as

Peninsula, where they compete for prey (rabbits and birds).

Bears and wolves
For several years Yellowstone Park in the U.S. has been the scene of confrontations between large bears and organized wolves fighting for food.