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PRESS RELEASE



PeerJ – the Journal of Life and Environmental Sciences

Gorillas gather around and groom their dead

Scientists observe cases of gorillas touching and grooming the bodies of dead individuals, with potential implications for the spread of diseases like Ebola.

It is now known that many animals exhibit unique behaviors around samespecies corpses, ranging from removal of the bodies and burial among social insects to quiet attendance and caregiving among elephants and primates. Researchers in Rwanda and Democratic Republic of Congo have been able to take a close look at the behavioral responses to the deaths of three individuals — both known and unknown — in gorillas and have reported their findings in *PeerJ* – the Journal of Life and Environmental Sciences.

Scientists from the Dian Fossey Gorilla Fund, the University of California Davis, Uppsala University, and the Congolese Institute for the Conservation of Nature observed and filmed the behavior of mountain gorillas around the corpses of a 35-year-old dominant adult male and a 38-year-old dominant adult female from the same social group living in Volcanoes National Park, Rwanda. Both individuals had died a few hours earlier of illnesses possibly linked to their advanced age. Researchers also studied the behavior of a group of Grauer's gorillas who found the body of a recently deceased adult male in Kahuzi-Biega National Park, Democratic Republic of Congo.

Researchers predicted that more individuals would engage with the corpses of familiar members of their own group compared to the extra-group mature male and that individuals who shared close social relationships with the deceased would be the ones to spend the most time close to body.

To the researcher's surprise, the behavioral responses toward the corpses in all three cases were remarkably similar. In all three cases, animals typically sat close to the body and stared at it but they also sniffed, poked, groomed and licked it. In the two mountain gorilla cases, individuals that shared close social relationships with the deceased were the ones who spent the most time in contact with the corpse. For example, a juvenile male who had established a close relationship with Titus, the dominant mountain gorilla silverback male, after his mother left the group, remained close and often in contact with the body for two days, and slept in the same nest with it. The juvenile son of Tuck, the deceased adult female, groomed the corpse and even tried suckling from it despite having already been weaned, a behavior that could indicate his distress near his mother's body.

This work is not only of interest regarding how animals perceive and process death, but it also has important conservation implications. Close inspection of corpses can present a serious risk for disease transmission. Contacts between healthy individuals and infected corpses may be a major way through which diseases like Ebola, which have affected and killed thousands of gorillas in Central Africa, spread among gorillas.

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Images:



Image 1: A Grauer's gorilla group gathers around the body of a male gorilla encountered in the forest of Kahuzi-Biega National Park. Image Credit: Dian Fossey Gorilla Fund International (gorillafund.org) – shared under CC BY 4.0



Image 2: A juvenile mountain gorilla inspects the body of his mother for several hours after she died in Volcanoes National Park, Rwanda. Image Credit: Dian Fossey Gorilla Fund International (gorillafund.org) – shared under CC BY 4.0



Video 1: A juvenile mountain gorilla touches and grooms the body of his mother in Volcanoes National Park, Rwanda. Video Credit: Dian Fossey Gorilla Fund International (gorillafund.org) - video shared under CC BY 4.0

Full Media Pack including image and video:

https://drive.google.com/drive/folders/1GkBm_0C5QnS_NuQ09NVofenl60QW 3H6o?usp=sharing

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