

CAUSES OF INTERGROUP AGGRESSION AMONG CHIMPANZEES AT GOMBE

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Male chimpanzees defend group territories by patrolling boundaries and aggressively repelling – and sometimes killing – rivals. Such intergroup violence is now known to be a widespread trait of chimpanzees, and provides key insights for understanding the evolution of human warfare. Debate continues, though, as to whether intergroup aggression is motivated primarily by competition for food resources, or by efforts to recruit female immigrants. To gain a better understanding of the causes of intergroup aggression in chimpanzees, we analyzed 35 years of data from Gombe National Park, Tanzania. We found that the rate of boundary patrols and intergroup encounters varied greatly over time. Direct physical contact occurred infrequently, but resulted in severe injuries, including at least 17 fatalities. Most of the observed cases of intergroup violence occurred during two periods: the destruction of the Kahama community in the 1970s, and the more recent expansion of the Kasekela community. The timing and location of patrols and intergroup encounters depended on the abundance and location of key food resources, and also on the relative size of neighboring communities. The Kasekela chimpanzees directed most of their territorial effort towards the food-rich range of the Mitumba community, but gained most of their female immigrants from the Kalande community, suggesting that competition for food, rather than females, is the more common motivator for intergroup aggression in this population.

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