

THE FUNCTION OF FEMALE INTERGROUP AGGRESSION IN *COLOBUS VELLEROSUS*

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Female intergroup aggression may be a form of resource defense, infant defense, or resistance to female immigration. This study investigates these three hypotheses in *Colobus vellerosus* at Boabeng-Fiema Monkey Sanctuary, Ghana. Data were collected via *ad libitum* and focal sampling of 61 females from 8 groups during 11 months with a total of 1554 observation hours. First, the presence of female aggression during 110 intergroup encounters was analyzed with a multiple logistic regression controlling for encounter duration. Female aggression was affected by the encounter location ($P < 0.05$), but not by the presence of young infants in their own group or the number of potential female immigrants in the opposing group. Second, the 24 encounters that females initiated were analyzed with chi-square tests. Females initiated more encounters than expected within the core area of their home range ($P < 0.05$), and fewer encounters than expected when their group contained young infants ($P < 0.05$). The frequency of female initiation did not differ from expected when potential female immigrants were present. In summary, the resource defense hypothesis is supported since females initiate and show aggression more often in their core area. Female aggression is not a common infant defense strategy. Instead, females initiate intergroup encounters less frequently when young infants are present. My results did not support the resistance to female immigration hypothesis. However, females always directed high-intensity aggression to females from opposing groups who copulated with their resident male ($N=5$), which may reduce the likelihood of female immigration.

Key words: resource defense, infant defense