Bros and brothers disperse together in spotted hyenas

Eve Davidian*[1]

[1]Institut des Sciences de l'Evolution de Montpellier – Institut de recherche pour le développement [IRD] : UR226, Centre National de la Recherche Scientifique, Université de Montpellier – France

Résumé

Why do some individuals coordinate their behaviour in space and time and settle in the same breeding group? Is it an active decision that is driven by the selective advantages of settling with kin and social allies? Or the mere consequence of similarities in needs, capacities and available destinations? We examined the likely drivers of the coordination in breeding-group choice among male spotted hyenas. We used 24 years of continuous demographic and social monitoring of the eight hyena social groups inhabiting the Ngorongoro Crater in Tanzania. We compared the choices of 148 pairs of same-cohort males that varied in similarity (i.e., maternal and socio-ecological background and genotype) and kinship. We found strong support for both active and passive processes! Twin brothers who share most cumulative similarity were most likely (70%) to settle in the same group, followed by distantly-related but familiar peers (36%), and of strangers originating from different groups (7%). Also, coordination among twins increased when population density and associated benefits of kin cooperation increased. I will further address the possible implications that these patterns have for cooperation between males and male reproductive success after settlement in their new group.

Mots-Clés: kin selection, sibling resemblance, collective dispersal, behavioral synchronization, male cooperation, social mammal, individual based study

*Intervenant