

Members of small monkey groups more likely to fight

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Small monkey groups may win territorial disputes against larger groups because some members of the larger, invading groups avoid aggressive encounters. In a new report published in *Proceedings of the National Academy of Sciences*, Margaret Crofoot and Ian Gilby of the Smithsonian Tropical Research Institute and the Max Planck Institute of Ornithology show that individual monkeys that don't participate in conflicts prevent large groups from achieving their competitive potential.

The authors used recorded vocalizations to simulate territorial <u>invasions</u> into the ranges of wild white-faced capuchin monkey groups at the Smithsonian reasearch station on <u>Barro Colorado Island</u> in Panama. Monkeys responded more vigorously to territorial challenges near the center of their territories and were more likely to flee in encounters near the borders.

Defection by members of larger groups was more common than defection by members of smaller groups. Groups that outnumbered their opponents could convert their numerical superiority to a competitive advantage when defending the center of their own range against neighboring intruders, but failed to do so when they attempted to invade the ranges of their neighbors, because more individuals in large groups chose not to participate. According to the authors, these behavior patterns even the balance of power among groups and create a 'homefield advantage' which may explain how large and small groups are able to coexist.



More information: Crofoot, M.C. and Gilby, I.C. 2011. Cheating monkeys undermine group strength in enemy territory. *PNAS*. www.pnas.org/cgi/doi/10.1073/pnas.1115937109

Provided by Smithsonian Tropical Research Institute

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