

Romeo and Juliet roles for banded mongooses

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Two packs of mongoose are fighting. The pack on the right is charging in for an attack, while the other temporarily retreats. This fight was very serious and resulted in the death of one of the males. Credit: Dr Harry Marshall

Banded mongooses take extraordinary risks to ensure that they find the right mate.

Female banded [mongooses](#) risk their lives to mate with [rivals](#) during

pack 'warfare' and both [males](#) and females have also learned to discriminate between relatives and non-relatives to avoid inbreeding even when mating within their own [social group](#).

Researchers from the University of Exeter and Liverpool John Moores University found that 18% of wild banded mongoose pups are fathered by males from rival packs.

Banded mongooses are found living in stable social groups across Central and Eastern Africa. They are highly social, with most individuals remaining in their natal pack surrounded by [relatives](#) for their whole lives.

Dr Hazel Nichols, lead author of the study, from Liverpool John Moores University said: "These pups are less likely to be inbred, are heavier and have higher survival chances than their within-pack counterparts. However, their mothers risk a lot to mate with extra-pack males; aggressive encounters between packs account for 20% of pup deaths and 12% of adult deaths."

"Banded mongooses aren't the only animals that fight with rival packs. Humans, for example often engage in warfare. However banded mongooses are unusual because a lot of mating occurs during these fights, even though it is a dangerous time to decide to mate with one of your rivals!"

Dr Jennifer Sanderson, from the Centre for Ecology and Conservation at the University of Exeter's Penryn Campus in Cornwall, who co-authored the study said: "The most exciting thing we found is that [females](#) are more likely to mate with males from rival packs if they are surrounded by unsuitable mates - such as their brothers and uncles - in their own pack. When this happens, they are much more likely to take the risk of mating with a male from another pack."

The study forms part of a 20 year project, led by Professor Michael Cant from the University of Exeter.

'Adjustment of costly extra-group paternity according to inbreeding risk in a cooperative mammal' by Hazel Nichols, Michael Cant, and Jennifer Sanderson is published in the journal *Behavioral Ecology*.

Provided by University of Exeter

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