

Mongoose pups conceal identity to survive

May 2 2017



Mongoose pups may conceal their identity to avoid attack by adults they are not closely related to. Credit: Feargus Cooney

Young mongooses may conceal their identity—even from their own parents—to survive.

Killing of [pups](#) is common in mongoose social groups, and researchers

from the University of Exeter believe offspring may do best if they hide which adults they are related to.

Concealing identity reduces the risk of attack by less-related adults, the researchers say.

But it means mothers may not be able to tell pups apart, and therefore cannot pay special attention to their own young.

"In most species we would expect mothers target care at their own offspring, but mongooses seem unable to do this," said Dr Emma Vitikainen, of the Centre for Ecology and Conservation on the University of Exeter's Penryn Campus in Cornwall.

"We think this is because mothers synchronise birth to the same day, and pups may have evolved to conceal their identity.

"In the banded mongoose infanticide is common, and it might be too dangerous for the pups to advertise which adults they are most closely related to, as this could expose them to spiteful behaviour by less-related group members."

A system of adult "helpers" operates in [mongoose](#) groups, with adults often looking after pups that are not their own.



Mongoose pups may conceal their identity to avoid attack by adults they are not closely related to. Credit: Harry Marshall

They do not choose which young to care for based on relatedness, the researchers said.

Dr Vitikainen added: "Intriguingly, we also found that female helpers tend to pair up with female pups, and male helpers with male pups." The study also found that females become more likely to act as helpers after they have given birth.

Professor Michael Cant, who leads the long-term study of banded mongooses in Uganda said: "We know that among [adults](#), individuals can discriminate kin from non-kin when it comes to mating and evicting

rivals from the group.

"But for pups that are vulnerable to infanticide, anonymity may be the best strategy for all."

The paper, published in the journal *Proceedings of the Royal Society B*, is entitled: "Biased escorts: offspring sex, not relatedness explains alloparental care patterns in a cooperative breeder."

More information: Biased escorts: offspring sex, not relatedness explains alloparental care patterns in a cooperative breeder, *Proceedings of the Royal Society B*, [rspb.royalsocietypublishing.or ...
.1098/rspb.2016.2384](https://royalsocietypublishing.org/doi/10.1098/rspb.2016.2384)

Provided by University of Exeter

Citation: Mongoose pups conceal identity to survive (2017, May 2) retrieved 26 April 2024 from <https://phys.org/news/2017-05-mongoose-pups-conceal-identity-survive.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.