

Mongoose pups work together to wheedle food out of carers

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Mongoose pups use their littermates to gain more food from their carers. Researchers at the University of Cambridge found that a unique system of pup care reduces competition for adult help, allowing pups to collectively benefit from begging by their littermates.

Matthew Bell, of the Department of Zoology at the University of Cambridge, has studied the behaviour of Banded Mongoose (Mungos mungo) pups and found that the begging, or pester power, of the pups helped the entire litter to receive more food from their individual escorts. Each pup is then able to use less energy begging for food, a selfish act that benefits the rest of the littermates.

As pups emerge from the den they each adopt an escort, an adult member of the family group. This escort becomes the sole provider of food for the pup until it reaches independence. The amount of food that this escort provides their adopted pup is influenced by the level of begging from their pup and the litter size.

To test how the pups benefited from the begging of their companions, pups were temporarily removed from the litter. In response the remaining pups would increase their level of begging, yet were fed a similar amount of food and gained less weight.

This is the first study to show that by compensating for the reduction in the number of pups begging in the litter, the remaining pups must pay an energetic cost to gain a similar reward.



Following his research, Bell speculated that offspring in many species may use the increased begging of companions as a warning that some littermates may be starving. A starving littermate could adversely affect the other pups, so by increasing their begging they may be able to increase the food supplied to hungrier companions.

Matthew Bell who led the study said: "These results suggest that there might even be situations where screaming offspring aren't begging for themselves, but are trying to induce parents to feed hungry siblings. The challenge is now to determine how offspring in other species might benefit from their siblings, despite underlying conflict over who gets the most attention from their parents."

This study, published online by *Current Biology* and funded by the UK Natural Environment Research Council, shows that the unique escort system in Banded Mongoose families reduces the competition between members of the group, improving the success of the individuals within the group.

Source: University of Cambridge

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