How to blackmail your parents for food

Fledglings extort food by putting themselves in danger.

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10 April 2013

Begging loudly has long been viewed as an offspring's way of saying "I'm hungry". But in predator-filled environments, these squawks can put young birds in harm's way, and may be a form of blackmail that forces parents to pay attention and feed the youngsters more than they might otherwise.

Alex Thompson

By making noise that could potentially expose them to predators, young pied babblers get their parents to give them more attentions.

The discovery comes from a three-year analysis of a well-studied community of pied babbler (*Turdoides bicolor*) in the Kalahari Desert of South Africa ¹. Alex Thompson of the University of Cape Town and colleagues from Britain and Australia, spent more than 200 hours observing the animals in the wild and recorded more than 3,000 incidents of parents feeding fledglings.

Thompson and his team noted that fledglings were fed an average of 0.12 grams of food per minute when on the ground and away from cover, but just 0.03 grams per minute when begging from the safety of the trees. Furthermore, when the birds were played an audio recording of alarm calls indicating that a ground predator was in the vicinity, parents more than doubled the amount they gave to ground-based youngsters, but made no compensation for those in the trees.

Fascinated, the team speculated that the young, which were slower than adults to respond to the alarm calls and cannot escape as quickly from danger, were intentionally putting themselves into a dangerous situation when hungry to force their parents to pay attention and feed them.

To test this out, he manipulated fledgling appetite by giving some individuals extra food, then studying where they went. He found that before being supplemented, fledglings spent almost 40% of their time in the safety of trees, but afterwards, they spent 62% of their time in the trees. This hinted that hunger was leading them to the ground, where they would be fed more.

Risky ventures

"These fledglings seem willing to pay the potential cost of increased predation risk by moving to the ground so that they can blackmail their parents into feeding them more," says Thompson. The team is publishing its results in the *Proceedings of the Royal Society B*¹.

"Most studies on begging focus on nestlings, so it's very interesting to see a study on the more mobile fledglings," says evolutionary biologist Rufus Johnstone at the University of Cambridge, UK. But Johnstone says that he also has some concerns. "The question I come away with is whether it's possible to distinguish between blackmail and honest signalling of hunger," he says.

"This study begs for further research," says avian ecologist László Garamszegi at the Doñana Biological Station in Seville, Spain. "It is bewildering that the fledglings move into such a risky position. A fledgling risks not only its own life but also the lives of its parents and their potential to create offspring with many of its own genes. Given the costs, it seems like it would be better for parents to sacrifice the life of an offspring."

Thompson doubts it is possible to draw any real parallels between the birds' behaviour and that of human teenagers who love to do risky things to attract attention. But a mother shopping with a screaming baby in tow may be a better analogy. "I know from personal experience that parents are more willing to buy kids sweets or treats if they start screaming in a public place. It isn't a predation risk, but it is an embarrassment risk."

Nature | doi:10.1038/nature.2013.12774

References

1. Thompson, A. M. et al. Proc. R. Soc. B http://dx.doi.org/10.1098/rspb.2013.0558 (2013).