

Sharing parenting leads to healthier young, beetle study finds

August 1 2018



Burying beetle offspring raised by both parents grow to a healthier weight and are more likely to reach adulthood than those raised by one parent, research by the Universities of Edinburgh and Glasgow has found. Credit: Per Smiseth

Animals who share the task of parenting do a better job than parents who do so on their own, according to a study of insects.

Offspring raised by both parents grow to a healthier weight and are more likely to reach adulthood than those raised by one parent, research into beetles has found.

The research is the first to offer evidence of whether being raised by two parents has benefits for offspring. It could help explain why many species—including birds, mammals, fish and insects—have evolved to share the burden of nurturing their young.

Researchers at the University of Edinburgh set out to examine whether care from two parents is greater than the sum of its parts, or if conflict between parents over their shared workload has a [negative impact](#) on their young.

In an experiment with burying beetles—which are acknowledged to be skilled parents—scientists examined how well pairs of adults compared with sole parents. Dozens of pairs of parents and single adult beetles were each given a brood to raise to adulthood, with single beetles given half as many young compared with the pairs.

Researchers found that young which were raised by both parents were better off—despite male beetles being seen to do less when working alongside their [female partners](#).

Scientists say their finding supports the idea that co-parenting may help ensure animals can pass on their genes, in a trade-off against producing more young. In addition, both parents may pass on [good bacteria](#) to their young through close contact.

The study was published in *Proceedings of the Royal Society B*.

Dr. Natalie Pilakouta of the University of Edinburgh's School of Biological Sciences, who led the study, said: "We've shown that offspring grow better and are more likely to survive if reared by both [parents](#). This might help explain why shared parenting has evolved in so many species of animals."

More information: Biparental care is more than the sum of its parts: experimental evidence for synergistic effects on offspring fitness, *Proceedings of the Royal Society B*, [rspb.royalsocietypublishing.or1098/rspb.2018.0875](https://rspb.royalsocietypublishing.org/doi/10.1098/rspb.2018.0875)

Provided by University of Edinburgh

Citation: Sharing parenting leads to healthier young, beetle study finds (2018, August 1) retrieved 25 April 2024 from <https://phys.org/news/2018-08-parenting-healthier-young-beetle.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.