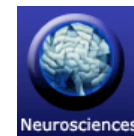




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Strange behavior - why do female wasps kill their brothers?

Submitted by [Cash](#) on 2 April 2007 - 3:00am. [Zoology](#)

For all that Darwin did, Evolution as yet has no explanation for puzzling animal behavior.

Social insects provide some of the most fascinating examples of altruism in the natural world, with sterile workers sacrificing their own reproduction for the greater good of the colony.

That isn't the case with all insects - in some cases, there is a very real battle of the sexes going on, even in their larvae.

It's been generally believed that sterile 'soldier' larvae act in positive ways, by protecting them from attack by other species of parasitoids. Andy Gardner, Ian Hardy, Peter Taylor, and Stuart West, in a theoretical study of how natural selection shapes the behavior of these larvae, write in the April issue of the American Naturalist that their behavior is instead spiteful.

Gardner, of St John's College, Oxford University, explains, "We found that the bizarre genetics of these wasps means that brothers value their sisters more than sisters value their brothers, and so if sterile larvae function for the good of the group then it should be brothers who more willingly make the sacrifice. Alternatively, if the sterile larvae are used by each sex to wage war against the other sex, then it should be primarily females who are interested in killing their brothers. As it happens, most sterile larvae are female, suggesting a primary role in sex conflict."

This sex difference in killing behavior is why the gender ratio in these wasps is so noticeable, with females outnumbering males. More generally, it reveals how Darwinism can be used to explore the function of puzzling animal behaviors.

Andy Gardner, Ian C. W. Hardy, Peter D. Taylor, and Stuart A. West, "Spiteful soldiers and sex ratio conflict in polyembryonic parasitoid wasps" The American Naturalist, volume 169 (2007), pages 519–533 DOI: 10.1086/512107

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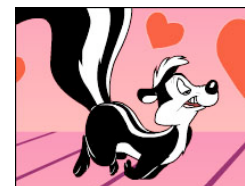
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