

Why Ants, Bees and Wasps Eat Their Siblings' Eggs

Monday , December 11, 2006

By Corey Binns



Bees can be ruthless relatives. Bumblebee queens eat their offspring's eggs, and honeybee workers make meals of their siblings' eggs.

But this ritual, gruesome by human standards, makes a bee family more productive.

Although worker bees are usually unable to mate, as females they can lay unfertilized eggs that emerge as males, if given the chance. The same applies to wasps and ants. But many don't survive.

• [Click here to visit FOXNews.com's Natural Science Center.](#)

In all of these cannibalistic acts, each eater's goal is to reduce the number of its genetic competitors.

"The queen eats the workers' eggs because she is more related to her own offspring," said entomologist Tom Wenseleers of the [Catholic University of Leuven](#), Belgium. "In the honeybee, the workers eat other workers' eggs because they are collectively more related to the queen's offspring."

Workers are prone to eating their siblings' eggs — an act scientists call "policing" — when their mother queen mates with multiple males.

In these species, including the honeybee, most workers are half-sisters, and more related to their brothers (sons of the queen) than nephews (sons of other workers).

Half-sisters show no mercy, devouring their nephews.

In species with [promiscuous queens](#), workers' sons are reared 100 times less than species with a single father, according to a new survey of more than 100 species of ants, bees and wasps conducted by Wenseleers and Francis Ratnieks at the [University of Sheffield](#) in England.

The findings were published in the November issue of the journal [The American Naturalist](#).

Both types of egg-eating support William Hamilton's 1964 relatedness theory: Closely related animals cooperate, while more distant relatives behave nastily toward one other.

"Close relatives are genetically more valuable, as they carry many copies of one's own genes," Wenseleers told LiveScience.

Copyright © 2006 Imaginova Corp. All Rights Reserved. This material may not be published, broadcast, rewritten or redistributed.

E-mailing sensitive information?
Send it securely with...
MessageGuard
Powered by NetworkSolutions.

SEARCH

GO

[Click here for FOX News RSS Feeds](#)

Advertise on FOX News Channel, FOXNews.com and FOX News Radio

Jobs at FOX News Channel.

Internships at FOX News Channel (now accepting Fall interns).

Terms of use. Privacy Statement. For FOXNews.com comments write to foxnewschannel@foxnews.com; For FOX News Channel comments write to comments@foxnews.com

© Associated Press. All rights reserved.

This material may not be published, broadcast, rewritten, or redistributed.

Copyright 2006 FOX News Network, LLC. All rights reserved.
All market data delayed 20 minutes.