

Egg police crack down on broody bees

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Would better policing reduce crime? It does in some insect societies. The apparently harmonious behaviour of worker honeybees and common wasps is all down to a watchful police force.

Tom Wenseleers of the Catholic University of Leuven (KUL) in Belgium and Francis Ratnieks of the University of Sheffield, UK, studied nine species of social wasps and the honeybee. In all of these colonies the workers have functional ovaries and could lay eggs, but instead they usually raise the offspring of the queen. What stops them from being selfish and laying their own eggs?

The answer turned out to be the "egg police". Wenseleers and Ratnieks found that the more effective the policing - where the queen or worker "police" eat worker-laid eggs - the lower the likelihood of a renegade worker laying its own egg (*Nature*, vol 444, p 50). "In honeybees the policing was so good, with 98 to 100 per cent of worker-laid eggs killed, that less than one in a thousand workers tried to lay an egg," says Ratnieks.

Conversely in some wasp species - particularly those with closely related workers - policing was slack and nearly half the workers laid eggs. When workers were not closely related they policed each other more strictly.

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