

"Long before it's in the papers"

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## **“Gangster” bird found to charge for protection**

Nov. 19, 2010  
Courtesy of BBSRC  
and World Science staff

**In what some scientists are likening to a mob protection racket, a species of birds in Africa has been found to guard other birds from predators in exchange for food.**

**On one level, the security service offered by the drongo birds of the Kalahari Desert would seem to be legitimate. They do provide some true protection—unlike quite a few mafiosos, who create the very threat that for a fee they will supposedly ward off.**



A drongo perched in a tree above pied babblers. (© Tom Flower, U. of Cambridge)

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**Yet there's a hint of the criminal in the drongo operation too, scientists say. The avian guards help themselves to “payment” by occasionally screaming out false warnings of predators, then using the resulting confusion to snatch food from their feathered clients. Nor do the latter seem to specifically request protection; rather, the drongos are just—there.**

**The drawbacks notwithstanding, the “client” birds, pied babblers, gain something from the arrangement, according to scientists. That's because the self-appointed sentinels, through their presence, allow the babblers to focus on foraging for insects rather than watching their backs.**

**The behavior may be a rare example of two species evolving from a parasitic to a “mutualistic” relationship, say the investigators, reporting the findings in the research journal *Evolution*.**

**“Drongos are parasitic birds who swoop in to steal food from other species,” explained Andrew Radford the Universities of Bristol, U.K., one of the researchers. Given this unsavory way of life, he went on, it was somewhat surprising to find that drongos perched above foraging babblers advertise their presence rather than keep a low profile.**

They announce themselves “by issuing a call called a ‘twank’ every four or five seconds,” Radford said.

The explanation, he added, seems to be that the “twank” reassures babblers someone is keeping a lookout against predatory birds. This lets the babblers forage for insects more effectively. That, in turn, leads to better opportunities for the drongos to filch some of the catch. “When we played back these ‘twank’ calls to a babbler group, we found that they spread out over a larger area and lifted their heads less often, indicating that they were less fearful of predators when they thought a drongo was keeping watch,” Radford said.

But when the drongos cry wolf about the presence of predators, they scare other animals into dropping their catch, which the drongos then pounce on, said Radford and colleagues. So pied babblers have basically evolved to tolerate the drongos giving false warnings and stealing some of their hard-earned gains in exchange for the chance to forage in relative safety when a drongo is on duty.

Like a “good gangster,” Radford said, the drongos—not particularly large birds—provide real protection sometimes, both by making true alarm calls and by “mobbing” predators as a group.

But “despite all of the useful services drongos provide, the foraging birds are still more responsive to [alarm] calls from other babblers. It seems likely that the babblers simply don’t trust the drongo mafia as much as their own flesh and blood.”

The research could provide insight into other important mutualistic and parasitic relationships in nature, said Douglas Kell, chief executive of the U.K. Biotechnology and Biological Sciences Research Council, which funded the study. “Evolutionary arms races, including those between parasites and their hosts, and plants and animals and the diseases that they suffer, underlie a whole range of socially and economically important areas of biology,” he noted.