

A beggars banquet—life in a shared nest

April 15 2015

It's not all bad for crow chicks who have to share their nest with an uninvited pushy guest such as a cuckoo youngster. For one, they can sit back and wait for food to arrive while the cuckoo chick does all the begging for nourishment. So says Diana Bolopo of the University of Valladolid in Spain, who led a study into the pros and cons associated with the parasitic relationship of the great spotted cuckoo with the carrion crow. The findings are published in Springer's journal *Behavioral Ecology and Sociobiology*.

When great spotted cuckoos parasitize and take over magpie nests, they do not evict the host's young from the nest. They do however succeed in out-competing the magpie [chicks](#) for [food](#), which often leads to the latter's death. This scenario isn't played out when greater spotted cuckoos lay up to three eggs in the nests of larger carrion crows. The chicks of both species are often raised together quite successfully, with the young crows ultimately growing bigger than the cuckoos.

Bolopo's team filmed seven parasitized crow nests and six uninvaded ones in Northern Spain during the 2004 to 2007 breeding seasons. They then had a good look and listen to how intensely the various chicks begged for food, and how adult carrion crows responded to these hunger cries when deciding which chick to feed first. The sampled parasitized nests contained between one to five crow chicks, as well as one [cuckoo](#) chick.

The great spotted cuckoo chicks raised alongside carrion crow chicks were not able to monopolize the food brought to the nest. This is because

crow caregivers preferred to feed crow nestlings over cuckoo nestlings. The fact that cuckoo chicks begged more intensely than crow chicks balanced matters out so that the young ones of each species received an equal amount of food in the end.

Bolopo's team found that cuckoo chicks definitely begged more intensely than the host chicks, no matter how large the whole brood was or how many caregivers were around. On the other hand, crow chicks raised alongside a cuckoo chick begged less intensely than those in nests without any unrelated broods present - and still managed to survive and thrive.

"Despite a higher begging intensity, great spotted cuckoos do not out-compete bigger carrion crow nestlings," says Bolopo. She speculates that the cuckoo's begging strategies are part of how it has evolved and adapted to a parasitic life in which it has to compete with either similar or larger-sized nest mates. "It might actually be advantageous to crow chicks to share the nest with a cuckoo, because the crow chicks do not have to waste so much energy on begging intensely for food on their own. This advantage might balance out the costs paid for being raised together with a parasitic invader, such as loss of siblings in earlier stages."

More information: Bolopo, D. et al (2015). High begging intensity of great spotted cuckoo nestlings favours larger-size crow nest mates, *Behavioral Ecology and Sociobiology*. [DOI: 10.1007/s00265-015-1895-z](https://doi.org/10.1007/s00265-015-1895-z)

Provided by Springer

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