

Angry birds: Size of jackdaw mobs depends on who calls warning

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Jackdaws in flight. Credit: Alex Thornton

Jackdaws recognise each other's voices and respond in greater numbers

to warnings from familiar birds than strangers, new research shows.

The [birds](#) produce a harsh "scolding call" when they spot a predator, calling fellow jackdaws to mob the intruder and drive it away.

University of Exeter researchers have discovered that each bird has a unique call, and the size of the mob depends on which bird calls the [warning](#).

The scientists played recordings of individual calls and found that the largest mobs assembled when birds heard the cry of a member of their own [colony](#).

"Joining a mobbing event can be dangerous, as it involves approaching a predator, so it makes sense for individuals to be selective in whom they join. Our results show that jackdaws use the ability to discriminate between each other's voices when deciding whether to join in potentially risky collective activities," said Dr Alex Thornton, of the Centre for Ecology and Conservation on the University of Exeter's Penryn Campus in Cornwall.

"We also found a positive feedback loop - if birds joining a mob made alarm calls of their own, this in turn caused more birds to join in, magnifying the size of the mob."



Jackdaws. Credit: Victoria Lee

The researchers studied wild jackdaws, a highly social member of the crow family, as part of the Cornish Jackdaw Project, a long-term study of jackdaw behaviour and cognition in sites across Cornwall.

In playbacks at nest-box colonies during the breeding season, they broadcast the warning calls of a resident from each nest-box, another

member of the same colony, a member of a different colony, and a rook (a species that often associates with jackdaws).

Jackdaws were most likely to respond to a warning from a bird from the resident nest-box owner, followed in turn by other colony members, non-colony members and rooks.

Responses were also influenced by caller sex, with jackdaws less likely to echo a warning if the caller was a female stranger from a different colony.

The paper, published in the journal *Scientific Reports*, is entitled: "Caller characteristics influence recruitment to collective anti-predator events in [jackdaws](#)."

More information: Richard D. Woods et al, Caller characteristics influence recruitment to collective anti-predator events in jackdaws, *Scientific Reports* (2018). [DOI: 10.1038/s41598-018-25793-y](https://doi.org/10.1038/s41598-018-25793-y)

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