

Between July and December 2014 we ran the Garden Rook Survey to see what we could learn about different aspects of Rook behaviour. Here we reveal what we found, some fantastic anecdotes, and what's next.

**While we've known** for a long time that corvids are clever, it seems that every year people are discovering new aspects of their intelligence. In 2015, there were two big stories. The first one was about a young girl in Seattle, USA who receives presents from the crows that she feeds. This behaviour is probably an extension of the crows' necessity to build social bonds. It was no surprise to the experts that the crows remembered the little girl as they can recognise and remember individual humans.

The other corvid intelligence story to have made the news was the revelation that crows can count. This has been a theory for a long time, even in folklore. The latest study has shown that crows recognise numbers of dots, even if they are different sizes or shapes. The study found that neurons in the brain did not register any difference in the dots, just that the number. This is the same as how primates count, which is fascinating given how different their brains are.



▲ The majority of participants recorded feeding behaviour in their gardens.

#### WHAT WE FOUND

**A total of 91** people recorded at least one behavioural act during the recording period from across the country, though 43 commented on behaviour seen before it occurred. Of the behaviours recorded, feeding was the most common, followed by tolerance behaviour and vocalisations.

#### FEEDING AND OBJECT PLAY

**Unsurprisingly, 92% of** people who recorded behaviour saw Rooks feeding in their gardens. While the Rooks were not fussy, eating anything from seeds to 'Flutter Butter', a

couple of observers were surprised to see them take young birds or even mice. Four participants observed Rooks coming into their gardens for walnuts which anecdotally seem to be popular amongst corvids.

Almost 40% of observed feeding behaviour involved manipulation of feeders. A few Rooks seemed adept at pulling food up on strings, but most preferred to remove the feeders from where they were hanging to drop them onto the ground. It was interesting to see an element of cooperation though not surprising as Rooks have strong social bonds. One participant saw a bird pushing the feeder towards another Rook so that it could catch and feed from it. Several people saw individual birds emptying feeders so that others could feed on the ground below. Of the birds that were manipulating feeders, only 15% were juveniles, suggesting that these were birds that had learned these behaviours before.

Manipulation of feeders is very similar to object play behaviour, but sadly little of the latter behaviour was seen. One participant, however, did observe a Rook picking a stick up, dropping it, hopping away and repeating this behaviour which must have been for fun.

#### CACHING

**While quite a few** participants saw Rooks flying off with food, only 5% actually saw them bury it. It does make sense, however, for a bird to bury food away from prying eyes. Most Rooks that were observed caching were adults and took peanuts or bread. Many of the birds that watched to see where the food was cached included juveniles, presumably learning about what to do in the future.

## TOLERANCE

**64% of participants** observed Rooks displaying tolerance behaviour towards other species and only 35% of cases involved intolerance, suggesting Rooks are more than happy feed alongside other birds. Of the birds that were not tolerated, Jackdaws and pigeons were at the top of the list potentially due to being greater competition than smaller birds. Here are two stories that we found amusing, and show that Rooks think outside of the box:

*"[There was a] pigeon or dove on a telegraph pole a few yards away from a Rook in a tree. [The] Rook had a long branch in its possession. It looked at the other bird, snapped the stick to a required length, flew over to other bird, and knocked it off its perch with the branch!"*

*"Our Rooks are wary of Pheasants at first so try to move them on by tweaking their tails. The Pheasants move so that their tails are out of reach and both groups go on feeding. They are otherwise tolerant of other species except in hard weather or when the harvest is over and the ground hard."*

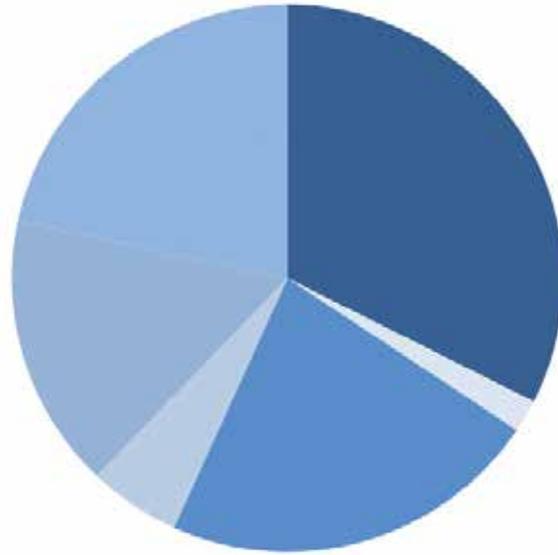
## VOCALISATION AND SOCIAL BEHAVIOUR

**According to anecdotal** comments from participants, juvenile Rooks seemed to have a much more limited vocabulary than the adults and were often only vocal when begging. While many people heard Rooks generally cawing, almost a quarter saw them doing so with display behaviour. Many also commented on how adults would fly into nearby trees and advertise that food was being put out and one person even heard a Rook 'sing' which is very rare. They described it as involving caws, clicks, pops and chattering without a break.

Other than vocalising, the other social behaviour observed most was Rooks feeding each other. While much of this was early in the recording period, with adults feeding juveniles, some people did see it as part of pair-bond behaviour. Some people also saw pairs displaying together and grooming each other.

## THANK YOU

**This survey was** the first of its kind at the BTO so we were thrilled to get such positive feedback. Everyone seems to appreciate their Rooks and despite their ability to get to food that was not put out for them, they seem very well tolerated. Given the success we may think about running another behaviour survey in the future.



■ Caching                      ■ Play                      ■ Social  
■ Vocalisation                ■ Tolerance                ■ Feeding

▲ Caching and play were the behaviours seen least, with feeding and tolerance behaviours seen most.

Results were sent in from all over the country including as far north as Orkney and as far south as the Lizard Peninsula in Cornwall.

