

Ravens cooperate—but not with just anyone

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Through cooperation, the Ravens were able to get a piece of cheese. Credit: Jorg Massen, Universität Wien

Ravens spontaneously solve a task that requires both coordination and cooperation—an ability that so far only a handful of species like chimpanzees and elephants have proved to master. A team of researchers led by Thomas Bugnyar of the Department of Cognitive Biology at the

University of Vienna showed this for the ravens using an experimental set-up. The results of their study have been published in the scientific journal *Scientific Reports*.

Several recent studies have already revealed that [ravens](#) are among the most intelligent species of birds and even species in general. The cognitive biologists from the University of Vienna now add cooperation the ravens' already impressive resume. "From the wild, it was already known that ravens are able to cooperate when, for example, mobbing predators. But using an experimental set-up working with captive ravens now allowed us to investigate, how exactly they do so", says lead-author Jorg Massen.

In the experiment two ravens had to simultaneously pull the two ends of one rope to slide a platform with two pieces of cheese into reach. If, however, only one individual would pull, the rope would slip through the loops on the platform and the birds were left with the rope and without cheese. Without any training the ravens spontaneously solved this task and cooperated successfully. However, it turned out that they didn't do equally well with everybody, and that they rather work together with friends than with enemies.

Interesting was what happened when one of the two birds cheated and instead of taking only its own reward, also stole the reward of its companion. The victims of such cheats immediately noticed and started defecting in further trials with the same individual. "Such a sophisticated way of keeping your partner in check has previously only been shown in humans and chimpanzees, and is a complete novelty among [birds](#)", ends Massen.

More information: Massen, J.J.M., Ritter, C. & Bugnyar, T. (2015). Tolerance and reward equity predict cooperation in ravens (*Corvus corax*). *Scientific Reports*, 5: 15021. Published online October 7th, 2015.

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