

The Earth's Smartest Birds

- 1 Until the 21st century, birds were largely dismissed as simpletons. How smart can you be with a brain the size of a nut? And yet the more we study bird intelligence, the more those theories are breaking down. Birds make good use of the allotted space for their tiny brains by packing in lots of neurons.
- 2 But what actually qualifies a bird as smart? The definition of intelligence should be broader than it is, scientists say. “We’ve restricted the playing field to things we think only we can do,” says Kevin McGowan, an expert on crows at the Cornell Lab of Ornithology in Ithaca, New York, “so being able to fly to Argentina, come back, and land in the same bush is not valued as intelligence. If we’re talking about standard intelligence – i.e. mimicking human speech or solving problems – it always comes down to parrots and corvids.”
- 3 Members of the corvid family (songbirds including ravens, crows, jays, and magpies, to name a few) are among the most intelligent birds. A study published in 2017 in the journal *Science* revealed that ravens even pre-plan tasks – a behavior long believed unique to humans and apes. In the simple experiment, scientists taught the birds how a tool can help them access a piece of food. When offered a selection of objects almost 24 hours later, the ravens selected that specific tool again – and performed the task to get their treat. “Monkeys have not been able to solve tasks like this,” Mathias Osvath, a researcher at Sweden’s Lund University, said in a previous interview.
- 4 While crows do nearly as well as ravens solving intelligence tests, McGowan stresses that crows have an uncanny memory for human faces – and can remember if that particular person is a threat. “They seem to have a good sense that every person is different and that they need to approach them differently.” For instance, crows are warier of new people than ravens are – but conversely are more comfortable with humans they had interacted with before, according to a study published in 2015 in the journal *Behavioral Ecology and Sociobiology*. “The crows around here, they know my face,” says McGowan. While at first the birds living near the lab seemed to dislike McGowan for approaching their nests, they love him



now that he's started leaving the birds healthy treats. "They know my car, they know my walk, they know me 10 miles away from where they've ever encountered me before. They're just amazing that way."

- 5 "There's also a lot going on in the little walnut brains of parrots," says McGowan. "And they live so long that they can amass a lot of intelligence and a lot of memories." 30 many species of parrots have a penchant for human speech, the African grey parrot is the most accomplished. In the 1950s, Harvard comparative psychologist Irene Pepperberg began teaching an African grey parrot, Alex, English sounds. Before he died prematurely in 2007, Alex mastered roughly a hundred words, could use them in context, and even grasped the concepts of same, different, and zero.

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