BIRD BRAIN

1 × 53 min.	Written and directed by **John Capener and Steve Nicholls**
HD, 5.1 and Stereo	Executive producer: **Sabine Holzer**

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For decades, we thought that birds were primitive animals, relying on instinct and little else. But recently we've come to realise how wrong this idea is. This film explores the very latest research into bird intelligence, including research by various international universities.

The crow family first started to show us how wrong we were about bird minds. For some time, ravens have amazed scientists with their sharp thinking. They quickly mastered a puzzle called the string-pull test, where food hangs from a branch on a length of string. Ravens finished it quickly, without any trial and error, showing that they solved the problem in their minds. Since then, research on other members of the crow family has revealed even more sophisticated thinking.

Rooks form large social flocks, sometimes numbering in tens of thousands. Social interactions could have contributed to the evolution of intelligence in apes, so that scientists ask if the same is true in birds. Rooks' social interactions have revealed hierarchies and relationships surprisingly similar to those in monkeys or apes.

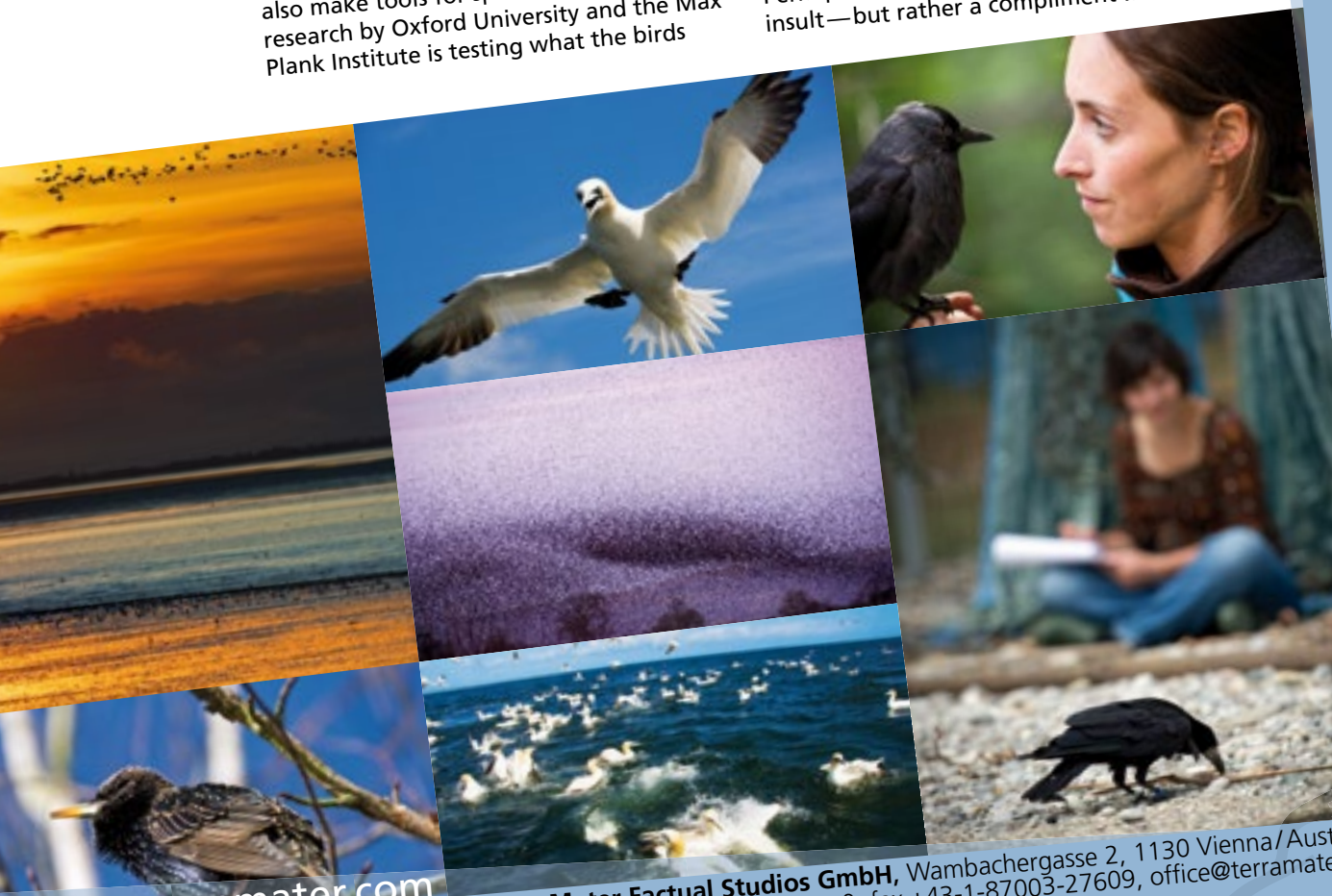
The crow family has also shown another sophisticated ability—tool use. New Caledonian crows not only use tools, but also make tools for specific jobs. Ongoing research by Oxford University and the Max Plank Institute is testing what the birds understand about the physical properties of their tools.

More recently, researchers studied other bird families, especially parrots. They are famed for being able to talk, but are they just pretty feathers with a talent for mimicry? Parrot research shows that blue-fronted Amazons, Hyacinth and Lear's macaws can all solve the string-pull test just as well as ravens.

But king of the parrot minds are New Zealand's keas. These mountain parrots not only complete the simple string-pull test, but solve it with extra strings arranged to complicate the puzzle. Researchers from the University of Vienna have given their keas several new tests—from problem solving to co-operative tasks, even starting to test their basic understanding of grammar.

Research by the Konrad Lorenz Institute shows how ravens bury a useless object, such as a toy, in front of an observer to see what they do. If the observer steals the toy, then the raven remembers and changes its future hiding strategy when it has something valuable to hide. Understanding another mind and character shows the ravens' ability to imagine different viewpoint—an ability as sophisticated as that of any ape.

Perhaps now, 'bird brain' is no longer an insult—but rather a compliment …



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