

Bird Brain: insult or compliment

If someone called you a “bird brain” you’d probably be insulted right? But you shouldn’t, because birds are much more intelligent than you might think. We now know that certain birds are capable of making tools, of problem solving and even of self-recognition. But what we don’t know is why they have these abilities, and more broadly we still don’t actually know how intelligence has evolved?

Well, what if I told you that being social might just be what makes you smarter? Sounds strange right? But the animals we consider to be intelligent, like chimps, dolphins and even humans are all highly social species. And this theory makes sense when we think of all the challenges social animals face on a daily basis, for example they need to coordinate lots of different relationships, they need to monitor their group members and they also need recognise which are trustworthy and which are not.

So I want to put this theory to the test, but I don’t want to do it using a typical lab-based species. Instead I want to see whether the relationship between sociality and intelligence exists in the wild.

Luckily for me we have a local population of wild magpies that we work with as part of a long-term research project. Magpies are actually an incredibly interesting species to test because they live in highly social cooperative groups and research has already shown that they have outstanding levels of intelligence.

I will first measure sociality using something called social network analysis, which I like to think of as like a magpie facebook. Because it allows me to figure out who’s friends with who, who doesn’t get along and who’s a bit of a social butterfly and gets on with everyone. I can then measure intelligence by giving the magpies a series of tasks to solve just like the one you can see on the screen where the magpie has to remember where the food is hidden in this board. And through these I can figure out whether the most social magpies are also the smartest.

But if we think bigger picture, my project will provide fascinating insight into how intelligence has evolved. It will reveal whether social upbringing influences the development of intelligence which can potentially be applied to all social animals, including humans, and will inform fields from conservation management all the way through to social psychology. And so my hope is that through my research we can start to change the phrase “bird brain” from an insult into a compliment.