

# Great tits have as much impulse control as chimpanzees

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Biologists at Lund University in Sweden have shown that the great tit, a common European songbird, has a tremendous capacity for self-control. Until now, such impulse control has been primarily associated with

larger cognitively advanced animals with far larger brains than the great tit. According to the new results, the great tits' capacity for self-control is almost the same as that of ravens and chimpanzees.

The biologists placed [food](#) in a small translucent cylinder. Resulting pecking behaviour by the great tits was considered an impulsive act. Those birds that moved to an opening in the cylinder to access the food without pecking were considered to demonstrate [impulse control](#). The results show that the great tits demonstrated impulse control 80 percent of the time. This is better than most other animals tested, and is almost on a par with intelligent animals such as ravens and chimpanzees.

"It's amazing that a bird with such a small brain has this type of self-control. The brain volume of a [great tit](#) corresponds to 3 percent of a raven's [brain](#) and 0.1 percent of a chimpanzee's," says Anders Brodin, professor at the department of biology.

The study was conducted by Anders Brodin, in collaboration with colleagues Utku Urhan and Emil Isaksson. A few years ago, the biologists discovered another ability of great tits—an unusually high ability to learn and to remember by observing.

That study showed that great tits can sit and observe at a distance, and memorise where species that store food hide their treats. The study also showed that females generally outperform their male counterparts in this respect. In this study, the great tits were compared with their close relatives, the marsh tit and the willow tit. Unlike the marsh and willow tits, great tits do not store food to survive the winter. Instead, they can observe where their relatives hide their food and subsequently steal it.

"Great tits are very resourceful small birds. Now we know that they also have great [self-control](#) and can handle their impulses when they want to gain access to a reward such as food," says Anders Brodin.

**More information:** Emil Isaksson et al, High level of self-control ability in a small passerine bird, *Behavioral Ecology and Sociobiology* (2018). [DOI: 10.1007/s00265-018-2529-z](https://doi.org/10.1007/s00265-018-2529-z)

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