Hatching order influences birds' behaviour

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A zebra finch.

The hatching order of birds influences how they behave in adult life according to research from the Lancaster Environment Centre.

Dr Ian Hartley and Dr Mark Mainwaring (LEC) are the authors of the study in Animal Behaviour, which looked at how the birds' behaviour was affected by the way their parents cared for them as hatchlings.

They found that the youngest members of zebra finch broods are more adventurous than their older siblings in adult life.

Dr Hartley said that the study showed for the first time that hatching order influences birds' "behavioural repertoires" in adulthood.

Hatching eggs over a period of time, rather than all at once, is known as "hatching asynchrony" and occurs when eggs are incubated as soon as they are laid. For a zebra finch, this means that birds born up to four days apart can share the same nest and must compete for food.

The researchers experimentally controlled hatching synchrony within clutches, so that some clutches hatched simultaneously, while others hatched over a period of days. They then tested the behaviour of over one hundred offspring as adults. They found the youngest birds from asynchronously hatched clutches explored their environment more widely.

They measured how explorative the zebra finches were by recording how many times they visited bird feeders within an unfamiliar test aviary. They found that the youngest offspring in a brood approached the feeders significantly more often than their peers within a 30 minute period.

Researchers wanted to know how the method of rearing affected the behaviour of offspring beyond the nest, once they were living as independent adult birds. The results have implications for understanding how environmental stability might influence behaviours, and how flexible animals might be at coping with environmental change.

More information: www.sciencedirect.com/science/ … i/S0003347212004678#

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