

'Baby, it's hot outside': Why birds sing to eggs

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Zebra finches sing to their eggs particularly when the weather is hot—above 78 Fahrenheit (26 Celsius)—and the end of their incubation period is near

Much like parents who talk to a pregnant woman's belly, some birds sing to their eggs before they hatch, and the reason may be to prepare them for a warming world, researchers said Thursday.

The study in the journal *Science* examined a peculiar habit of zebra

finches, which sing to their eggs particularly when the weather is hot—above 78 Fahrenheit (26 Celsius)—and the end of their [incubation period](#) is near.

What could they be saying? Could it have to do with the temperature outside?

Researchers thought it might, since eggs are unaffected by outside temperatures and are kept at steady temperature of 98.6 F when the parents are sitting on them.

So Mylene Mariette and Katherine Buchanan of Australia's Deakin University recorded the calls and played them for eggs in an incubator.

Some eggs were played regular contact calls from adult [zebra finches](#), while others were exposed to particular calls made by expectant parents, chirping to their [eggs](#) before they hatch in warm weather.

Those who heard these so-called hot calls grew slower and emerged smaller when they hatched than the other birds.

This compact size would present a survival advantage, because having a small body makes it easier to cool down in hot climes.

As they tracked these hot-call birds over time, researchers found they had more offspring than the other birds that did not hear the preparatory calls during the hot weather.

Researchers believe that the calls somehow affect the babies' growth, since they are delivered in the last one-third of the incubation period when the hatchlings' temperature and regulation system is starting to develop.

"By acoustically signaling high ambient temperatures to their embryos before hatching, zebra finch [parents](#) can program the developmental trajectories of their offspring," said the study.

If such a strategy is found to exist in other animals, it would suggest a previously unknown survival mechanism to help creatures adapt to global warming, researchers said.

More information: "Prenatal acoustic communication programs offspring for high posthatching temperatures in a songbird," *Science*, [science.sciencemag.org/cgi/doi ... 1126/science.aaf7049](https://science.sciencemag.org/cgi/doi/10.1126/science.aaf7049)

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