

Sperm with specific 'looks' are selected to fertilise bird eggs, say scientists

June 8 2016



Fewer than one per cent of inseminated sperm reach the egg and a new study has discovered that successful sperm have certain characteristics which are preferred by the female bird.

In the research examining zebra finches, scientists found that these 'super swimmers' tend to have shorter heads with longer tails and are more similar to each other than other inseminated sperm.

Scientists believe that these traits help the sperm swim faster through the vagina. The bird then stores these sperm before giving them the chance to fertilise her egg.

Dr Nicola Hemmings from the Department of Animal and Plant Sciences said: "Previously it was thought that longer sperm were always more likely to reach the egg. However our study shows that the specific design of sperm is more important than total length alone.

"Long tails act as propellers for sperm, but beyond a certain length they seem to become less efficient.

"Shorter heads are also important as they have less surface area to create drag, allowing sperm to swim faster. The tiny subset of 'super swimmers' with these traits are better able to reach the egg."

The research is published today (Wednesday 8 June 2016) in the Royal Society journal *Biology Letters*.

Scientists believe that a better understanding of how the shape of [sperm](#) and size influences fertilisation success in non-human animals such as the [zebra finch](#) may point us in new directions for investigation in human fertility research.

More information: Intra-ejaculate sperm selection in female zebra finches, *Biology Letters*, [rsbl.royalsocietypublishing.or ...
.1098/rsbl.2016.0220](https://rsbl.royalsocietypublishing.org/doi/10.1098/rsbl.2016.0220)

Provided by University of Sheffield

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