

Baby sharks stay still to avoid being detected by predators

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Baby sharks still developing in their egg cases can sense when predators are near, and keep very still to avoid being detected, according to research published January 9 in the open access journal *PLOS ONE* by Ryan Kempster from the University of Western Australia and colleagues.

Adult sharks are known to use highly sensitive receptors to detect electric fields emitted by potential prey. In the current study, researchers found that embryos of some [shark species](#) employ similar means to

detect potential predators and escape being eaten.

The researchers found that, even within their egg cases, brown-banded bamboo shark [embryos](#) can sense electric fields that mimic a predator, and respond by reducing respiratory gill movements to avoid detection. According to the authors, their results suggest that even at these early stages, embryonic sharks can recognize dangers and instinctively try to avoid them.

Kempster adds, "Despite being confined to a very small space within an egg case where they are vulnerable to predators, embryonic sharks are able to recognise dangerous stimuli and react with an innate avoidance response. Knowledge of such behaviours may help us to develop effective shark repellents."

More information: Kempster RM, Hart NS, Collin SP (2013) Survival of the Stillest: Predator Avoidance in Shark Embryos. PLoS ONE 8(1): e52551. [doi:10.1371/journal.pone.0052551](https://doi.org/10.1371/journal.pone.0052551)

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