

Blue crab baby sizes and shapes influence their survival

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A blue crab larva at Rutgers' Haskin Shellfish Research Laboratory. Credit: Joseph Caracappa/Rutgers University-New Brunswick

Like people, blue crabs aren't all the same sizes and shapes. Now Rutgers scientists have discovered substantial differences in the body structures of larval crab siblings and among larvae from different mothers. And that can mean the difference between an early death and survival into adulthood for this important commercial and recreational species.

Unlike other crab [species](#), these larval differences aren't related to the size of their mothers, according to a study in *Biological Bulletin*. The differences can mean that babies from certain [mothers](#) may swim or feed more efficiently than others, giving them an advantage.

"Early larval stages of [crabs](#) can be challenging to work with in the lab, but they are key life stages to study in order to understand blue crab populations," said lead author Joseph Caracappa, a Rutgers University-New Brunswick doctoral student based at Rutgers' Haskin Shellfish Research Laboratory in Port Norris, New Jersey.

Blue crab larvae—the earliest life stage—look almost nothing like adult crabs and live in open water off the coast of New Jersey. Blue crabs support a substantial fishery in the Garden State and other eastern U.S. states, including Maryland. Scientists have been interested in the species for more than a century, yet much remains unknown about what happens to them early in life.

More information: *Biological Bulletin* (2018). [DOI: 10.1086/699922](https://doi.org/10.1086/699922)

Provided by Rutgers University

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