

Healthy coral populations produce a surprising number of offspring

October 18 2017



This photo shows coral reef fishes in the Coral Sea, off Australia. Credit: Rick Stuart-Smith, Reef Life Survey

Healthy coral populations can produce up to 200 times more juvenile corals than degraded coral populations nearby, according to a new study in *Conservation Letters*.

By studying one of the Caribbean's healthiest remaining coral reefs on



the island of Curaçao, researchers found that healthy coral populations had a higher percentage of successful parents and each parent produced up to four times more <u>offspring</u> compared with corals in degraded populations. Combined with higher coral numbers overall, the healthy populations produced up 200 times more offspring per square meter of coral reef.

The conservation value of healthy coral reefs is therefore higher than previously thought because of their outsized contributions to coral reproduction and reef recovery. Traditionally, coral abundance was the most widely-used method for assessing <u>reef</u> health. This new study shows this measurement underestimates the hidden differences in reproduction between healthy and degraded reefs. Because coral offspring can swim and disperse to other reefs, the healthiest remaining coral reefs can help re-seed and regrow coral reefs on local and regional scales.

"Healthy reefs are critical nurseries for baby corals and they support the recovery of coral communities elsewhere," said lead author Dr. Aaron Hartmann.

More information: *Conservation Letters* (2017). DOI: <u>10.1111/conl.12410</u>

Provided by Wiley

Citation: Healthy coral populations produce a surprising number of offspring (2017, October 18) retrieved 25 April 2024 from <u>https://phys.org/news/2017-10-healthy-coral-populations-offspring.html</u>

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