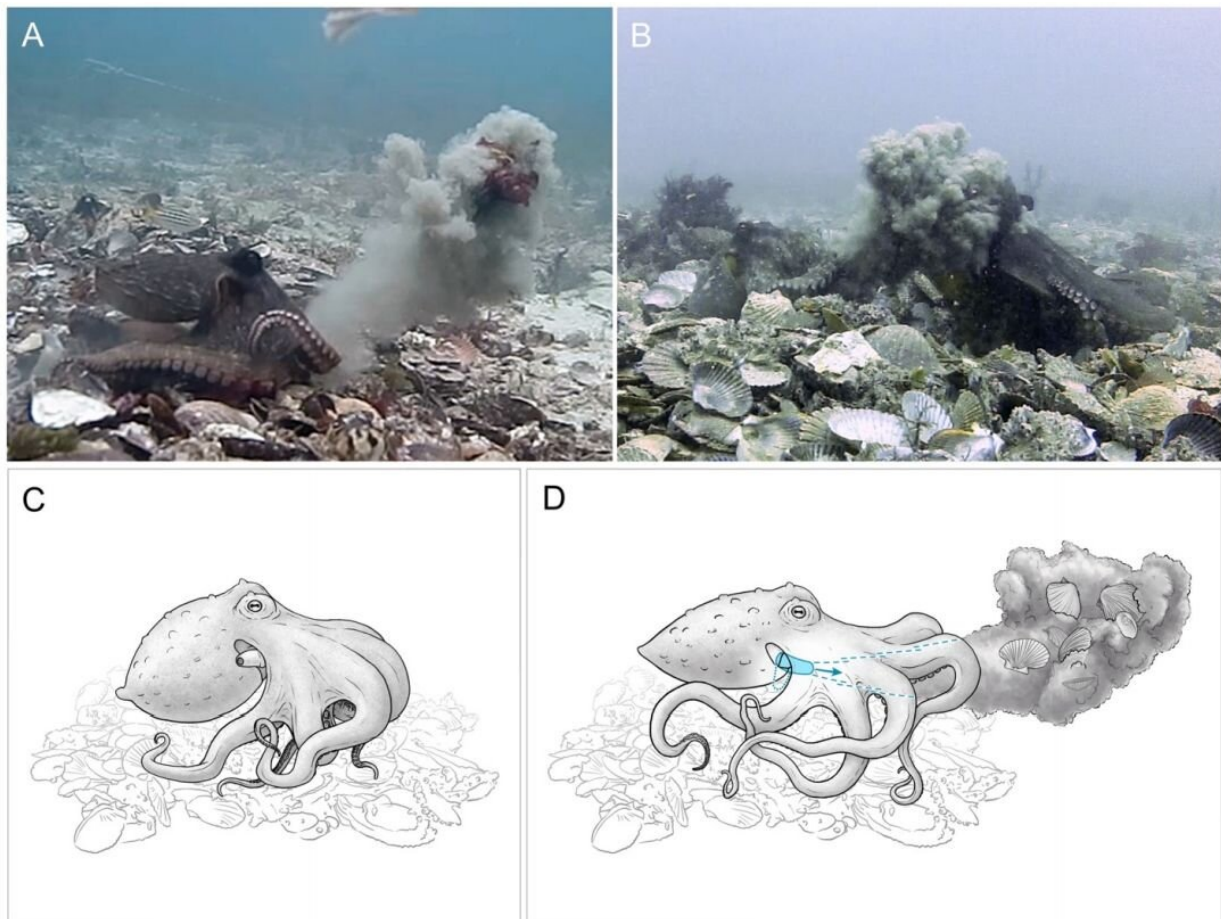


Female octopuses observed throwing stuff at males harassing them

August 30 2021, by Bob Yirka



Debris throwing by *Octopus tetricus* in the wild: Panel A - Octopus (left) projects silt and kelp through the water (from video by Peter Godfrey-Smith); B – an octopus (right) is hit by a cloud of silt projected through the water by a throwing octopus (left; see SI for video of this event); C, D The mechanics of throwing behavior, C – shells, silt, algae or some mixture is held in the arms preparatory to the throw, mantle is inflated preparatory to ventilation during the

throw, siphon at this stage may still be visible in its usual position projecting from the gill slit above the arm crown; D – siphon is brought down over rear arm and under the web and arm crown between the rear arm pair (arms R4 and L4), and water is forcibly expelled through the siphon, with contraction of the mantle, as held debris is released, projecting debris through the water column.

Illustrations by Rebecca Gelernter. Credit: *bioRxiv* (2021). DOI: 10.1101/2021.08.18.456805

A team of researchers from Australia, Canada and the U.S. has found that female octopuses sometimes throw silt at males who are attempting to mate with them. The group has written a paper describing their observations and has posted it on the bioRxiv preprint server.

Back in 2015, members of the research team recorded instances of octopuses throwing things at other octopuses. At the time, it was not clear if the other octopuses were being intentionally targeted or if it was accidental. To find out, they went back to the same site in Jervis Bay, off the coast of Australia, a site where large numbers of Sydney octopuses live.

In making more [recordings](#) and studying them carefully, the researchers were able to see that the female octopuses engaged in multiple types of object-throwing. In most instances, throwing material such as silt or even shells was simply a means of moving material that was in the way or when building a nest. Less often, they saw what were clearly attempts by [females](#) to hurl material at a nearby male—usually, one trying to mate with her.

The researchers found that the hurling was done by grabbing material such as rocks, silt or shells and holding them under the body. Then the material was placed over a siphon that the creature uses for pushing out a jet of water very quickly. Doing so propelled the material ahead of a jet

of water, sometimes as far as several body lengths.

In studying the tape, the researchers found multiple instances of females targeting [males](#). In one scenario, a female threw silt at a male individual 10 times. They also found that the males often tried to duck when objects were thrown at them, and were successful approximately half the [time](#). They also noted that throws meant to get rid of material were performed differently than those aimed at another octopus, involving tossing between the two front tentacles; suitor-repelling projectiles were usually launched between the first and second tentacles. The researchers also witnessed one female toss a [shell](#) like a frisbee using one of her tentacles. Notably, they did not see any evidence of males retaliating by tossing things back at females who were targeting them.

More information: Peter Godfrey-Smith et al, In the Line of Fire: Debris Throwing by Wild Octopuses, *bioRxiv* (2021). [DOI: 10.1101/2021.08.18.456805](https://doi.org/10.1101/2021.08.18.456805)

© 2021 Science X Network

Citation: Female octopuses observed throwing stuff at males harassing them (2021, August 30) retrieved 17 May 2024 from <https://phys.org/news/2021-08-female-octopuses-males.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.