

# Possible evidence of paternal care in bigfin reef squid

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Bigfin Reef Squid (*Sepioteuthis lessoniana*) at Sunshine 60 Aquarium (Ikebukuro, Tokyo). Credit: George Berninger Jr. Wikimedia Commons/CC by-SA 3.0

A trio of researchers, two from Universidade de Lisboa, the other from the American Museum of Natural History, has found possible evidence of paternal care in a cephalopod. In their paper published in the journal *Ecology*, Eduardo Sampaio, Samantha Cheng and Rui Rosa describe recording bigfin reef squid mating behavior in two vastly different areas.

As part of ongoing research into [squid](#), the researchers were recording specimens around the world. As part of their work, they captured images of bigfin reef squid mating rituals in the Red Sea and off the coast of Indonesia. The researchers found something unusual in the video—the male appeared to be helping the female find a suitable place to lay her eggs.

The researchers note that typical behavior for male squid involves fighting off competitors for a chosen female, copulating, then hanging around for a while to make sure other [males](#) do not sneak in and fertilize some of the female's eggs. In the case of the bigfin squid, things were a little different. First, after copulation, the male changed his coloring to black and white stripes and then raised his arms up while also pushing his tentacles downward, an awkward move for a squid. The male kept that position for a while—which the researchers suggest was likely a move to discourage rivals—and then darted off and into a nearby crevice. After emerging, the female then darted into the same crevice and shortly thereafter laid her eggs. The researchers suggest the move by the male was an attempt to ensure that the crevice did not present a danger to the female.

The researchers point out that nearly identical behavior was exhibited by males in two places located far apart, suggesting that the ritual is normal behavior for the species. They also note that such [behavior](#) is something that has never been seen before in squid. They acknowledge that they do not yet know what the male does in the crevice, but suggest more work could illuminate the complexity of squid mating rituals.

**More information:** Eduardo Sampaio et al, Location probing by males complicates sexual dynamics and successful mate-guarding in squid groups, *Ecology* (2021). [DOI: 10.1002/ecy.3529](https://doi.org/10.1002/ecy.3529)

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