

# Lionfish are able to catch faster prey through persistence

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Red lionfish (*Pterois volitans*) at the Aquazoo (aquarium) in the Zoo Schmiding in Schmiding near Bad Schallerbach, Austria. Credit: [Michael Gäbler](#) /Wikimedia Commons, [CC BY 3.0](#)

A pair of researchers at the University of California's, Department of Ecology and Evolutionary Biology, has found that the slow swimming lionfish is able to catch and eat faster prey by using persistence. In their paper published in *Proceedings of the Royal Society B: Biological Sciences*, Ashley Peterson and Matthew McHenry describe their lab study of lionfish predatory strategy.

Lionfish have been in the news of late due to their encroachment on parts of the oceans outside of their native Indo-Pacific region. The spikey fish are now considered to be an [invasive species](#) in many parts of the Pacific Ocean, and in some [coral reefs](#), they have become the top predator.

Prior research has shown that lionfish hunt by blending into the background and then latching on to passing [prey](#)—their jaws create a suction effect. But prior research has also shown that lionfish can catch prey in the [open water](#) where there is no place to blend in. How they do so has been a mystery, however, because they swim more slowly than most of their prey.

The pair's work involved placing a lionfish into a tank with a much faster swimming green chromis and recording the action. The researchers found that the lionfish was able to capture and eat the chromis in 14 of 23 trials and that the lionfish was successful 74% of the time when attempting a strike. The researchers also found that the chromis swam approximately twice as fast as the lionfish, which suggested difficulty in chasing them down. But the researchers found that chromis have to stop and rest now and then, while the lionfish does not—it continues pursuing its prey until it catches up. It also does so patiently, working to prevent attracting attention. Then, when it's close enough, if the chromis is not paying enough attention or is just plumb tuckered out, the lionfish strikes. A perfect example of the old adage "slow and steady wins the race."

**More information:** Ashley N. Peterson et al, The persistent-predation strategy of the red lionfish ( *Pterois volitans* ), *Proceedings of the Royal Society B: Biological Sciences* (2022). [DOI: 10.1098/rspb.2022.1085](https://doi.org/10.1098/rspb.2022.1085)

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