

# Giant claw helps fiddler crabs stay cool in more ways than one

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A male *Uca panacea* performs the waving display. (c) M. Zachary Darnell

A male fiddler crab's oversized claw not only looks cool to the ladies, but new research suggests it literally helps crabs to stay cool.

Researchers Zachary Darnell and Pablo Munguia of the University of Texas placed [crabs](#) under a hot light and took their temperatures.

They found that the temperatures of crabs missing their large claw rose faster and reached a higher maximum than intact crabs.

The finding suggests that in addition to having a role in mating displays and in fighting off competitors, giant claws aid in thermoregulation.

"The major claw may function like a heat sink, transferring heat away from the body and, through [convection](#), dissipating that [heat](#) into the air," Dr. Darnell said.

The cooling action may help crabs to spend more time out of their burrows for foraging or sexual display.

It might also help offset the energetic costs of such a giant appendage, the researchers say.

**More information:** M. Zachary Darnell and Pablo Munguia, "Thermoregulation as an Alternate Function of the Sexually Dimorphic Fiddler Crab Claw." *American Naturalist*, September 2011.

Provided by University of Chicago

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