

# Female peacock spiders show preference for multi-modal courtship

2 December 2015, by Bob Yirka



Male *Maratus pavonis* jumping spider. Credit: Bron/Wikipedia/Flickr

(Phys.org)—A trio of researchers, two from the University of California and one from the University of New South Wales, has found that female peacock spiders prefer a multi-modal manner of courtship from potential mates. In their paper published in *Proceedings of the Royal Society B*, Madeline Girard, Damian Elias and Michael Kasumovic describe their study of the tiny spiders and what their study has added to the general knowledge of female preferences regarding mate selection where there are examples of extreme ornamentation on display.

Scientists have known for quite some time that the males of many species have some degree of ornamentation meant to attract [females](#), from bright colors to strange appendages. They have also known that some males engage in what

appear to us humans as odd dances. What has not been so clear is how the females choose between one suitor and another. To learn more, the researchers focused on the tiny (quarter inch long) peacock spider. In this species, the males have a large colorful "tail" that they can spread wide like a peacock—they also have interesting colorings on their legs. Also, to gain even more attention from the female, the male engages in a unique vibration-type dance, unique in that it differs between members of the same species.

The study was conducted in Australia, home of the spider, where the team collected 64 male/female pairs and put them in what they called courtship arenas—enclosures where the [spiders](#) could engage in courtship under lights and with cameras capturing all the action. The goal was to see if it might be possible to figure out how each of the females decided to mate with their assigned partner, or not

In watching the spiders, the researchers noted the females were not often impressed with what a male had to offer, sometimes they simply turned away, while other times they simply ate them. In all, the team found that the females only liked 16 of the [courtship](#) dances, but by comparing success rates, the team was able to determine that on average, the way the male looked was twice as important as how he danced. Despite that, the researchers concluded that sexual selection ultimately came down to a combination of visual and vibratory displays.

**More information:** Female Preference for Multi-Modal Courtship: Multiple Signals are Important for Male Mating Success in Peacock Spiders, *Proceedings of the Royal Society B*, [rspsb.royalsocietypublishing.org/.../1098/rspb.2015.2222](http://rspsb.royalsocietypublishing.org/.../1098/rspb.2015.2222)

Read also: [The spectacular peacock spider dance and its strange evolutionary roots](#)

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