

In the animal world, bigger isn't necessarily better

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Shocking new research shows size isn't always an advantage in the animal world, shattering a widely-held belief that bigger is better.

Michael Kasumovic, a former University of Toronto Scarborough PhD student, examined Australian Redback male spiders to determine whether the larger ones had an edge in achieving mating success and producing offspring.

Surprisingly, Kasumovic found the large spiders didn't always have an advantage. Instead, because the larger males experienced a much longer maturation process, they were unable to search for and mate with females and produce offspring at the same rate as the smaller Redback spiders.

"Most people assume that large size and weaponry are key indicators of a male's fitness, because those traits help them dominate smaller males," says Kasumovic, now a post-doctoral research fellow at the University of New South Wales. "However, smaller males develop sooner and are therefore able to mate with females before the larger males. So while large males may dominate in combat, they are unable to compete with the smaller males in terms of mate searching."

The study, currently published online in the *Journal of Evolutionary Biology*, emphasized the important role maturation time plays in defining a successful male.

"Size is no longer the only ruler by which we can measure a male's quality," says Kasumovic. "Many other factors, including maturation time, are critical in that definition."

Source: University of Toronto

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