

A love game: Fish courtship more complex than thought

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Photo credit Dr P Andreas Svensson

Monash University researchers have discovered that male Australian desert goby fish are surprisingly strategic when it comes to courtship, adapting their tactics depending on the frequency of their contact with females.

Attracting females involves significant time, energy and exposure to predation and previous research has indicated that male gobies are more likely to court larger females due to the number of eggs they carry compared with their smaller counterparts.

However, new research, published in the journal [Behavioral Ecology and Sociobiology](#), indicates that should the [male fish](#) find himself

infrequently in contact with females, he will pursue any he finds with zeal, regardless of size.

Doctors Andreas Svensson, Topi Lehtonen and Bob Wong expanded on their previous research by procuring goby fish from Central Australia and monitoring their behaviour under controlled conditions in a laboratory.

Dr Bob Wong, a Senior Lecturer in the Science Faculty at Monash University, said the research showed that when males encountered females more frequently, the males were far more discriminating about how much effort they put into courting larger females over others.

"By contrast, males will court females vigorously irrespective of her attractiveness if passing females are few and far between," Dr Wong said.

Native to the springs and waterholes of the arid regions surrounding Lake Eyre, the desert goby is an unusual species.

Dr Wong said the male goby [fish](#) establish nests under rocks, try to attract passing females using colourful courtship displays and ultimately become the sole guardians of the eggs.

"Given this heavy investment in reproduction, males attempt to maximise their returns through higher egg yields," Dr Wong said.

"These findings are important because, for a long time, females were typically regarded as the more discerning sex when it comes to choosing a potential mate. Here, we show that males, too, can be highly picky and are much more tactical in whom they choose to court," Dr Wong said.

Provided by Monash University

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