

Do female guppies risk their lives to avoid sex?

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Sexual harassment is burden that females of many species face, and some may go to extreme lengths to avoid it. In a paper published in *The American Naturalist*, Dr Darren Croft from the University of Wales, Bangor and a research team from the University of Leeds suggest that female guppies (a popular aquarium fish) might risk their lives to avoid too much attention from males.

In a study on wild populations of guppies in the Rain Forest of Trinidad Dr Croft and his colleagues found that female guppies swim in habitats that contain predators but few males. But why do females risk their lives?

"Male guppies spend most of their time displaying to females: but if his courtship displays don't impress her, males will attempt to sneak a mating with her when she is not looking" said Dr Croft "As in many vertebrates it is the males that 'dress to impress', male guppies have bright colour patterns they use to attract females, whilst females are a dull brown colour. But the bright colours of males also attract the attention of predators"

The researchers showed that female guppies might use this to their advantage, venturing into the deep water where the predators lurk, where it is just too dangerous for the males to follow. By doing so, females avoid the attentions of males, but risk being eaten by the predators.

In many species of animals, males and females show a tendency to live



in different types of habitats, known as sexual segregation. "Sexual segregation is not restricted to fish; it is often found in deer and antelopes, and may even occur in humans," continued Dr Croft. "Ancient Greek mythology tells of a nation of female warriors known as the Amazons who lived on an island. The Amazons only met with men to trade and reproduce, and kept all daughters on the island. Whilst the degree of truth in this ancient myth is open to debate, in animals, sex differences in habitat use are common. Understanding why and how this behaviour occurs is essential if we are going to conserve and protect species and habitats. In many ecosystems predators are the first to go extinct and our work shows that this may have many, perhaps unexpected, knock on effects. In this case females may suffer more sexual harassment."

Source: University of Wales Bangor

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