

# Reluctant hero? Cleaner fish show it pays to be selfless

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This handout picture provided by the University of Neuchatel (UniNE) and taken in May 2007 shows a couple of cleaner fish operating on a parrotfish. Among some cleaner fish species, it appears that it is the males who are more devious than the females, scientists at the University of Neuchatel in Switzerland have found recently.

Putting yourself in the line of fire is shown to reap huge rewards, in a new study published this week in *Science*.

Researchers from the Zoological Society of London, University of Queensland and the University of Neuchâtel have discovered that male cleaner wrasse are quick to play the hero when their dinner is at stake.

Cleaner wrasse live on [coral reefs](#) and feed on the [parasites](#) of larger 'client' [fish](#). They gain an even bigger meal if they take some of the

[mucus](#) off the skin of a client, but this cheating behaviour results in a disgruntled customer.

The 'Alan Sugars' of the fish world, male cleaner wrasse prove they're no small fry when it comes to punishing their employees for upsetting clients. Males will aggressively chase females who deliver poor customer service, seemingly protecting the interests of the client when in fact they've got their own stomachs in mind.

Lead author Dr Nichola Raihani from the Zoological Society of London says: "Clients will leave if they are cheated at a cleaning station. That means the male's dinner leaves if the female cheats. By punishing cheating females, the males are not really sticking up for the clients but are making sure that they get a decent meal".

This tendency to stick up for a victim is something that humans are particularly prone to, but no one really knows why we do it. This study raises the possibility that 'Robin Hood' type behaviour might be less charitable than we think.

The next stage of the research will concentrate on the threat posed to male fish by similar sized females who can undergo sex changes and ultimately challenge their authority.

**More information:** 'Punishers benefit from third-party punishment in fish', *Science*, [DOI:10.1126/science.1183068](https://doi.org/10.1126/science.1183068)

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