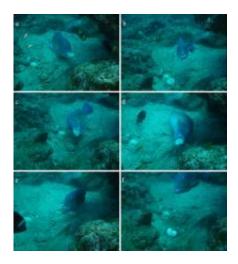


Scientists discover fish using tools may be wide spread

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Dr. Culum Brown, who recently made headlines publishing the first photographic evidence of a tusk fish using tools to smash open shells says, "There is an increasing body of evidence that suggests that fish have been largely underestimated in terms of their abilities."

Tool use is inherently difficult underwater especially for animals that lack hands but what Dr. Brown has observed is that fish have found many ingenious solutions to allow them to over come this.

Many species of wrasse, for example, use anvils to smash open shell fish and other difficult to handle prey. Until recently, there were few



examples of this behavior, but there are a growing number of observations in the literature.

"We now have fantastic proof of these intelligent fish at work <u>using tools</u> to access prey that they would otherwise miss out on," said Dr. Brown.

Dr. Brown also argues that you can make a case for the way some fish manipulate their watery environment to achieve a desired goal as meeting the common definition of <u>tool</u> use.

"Archerfish squirt water from their mouths to dislodge terrestrial prey items above the surface and trigger fish blow water streams to turn sea urchins over, to access their more vulnerable side. Both documented examples have all the hallmarks of tool use and are probably cognitively demanding," says Brown.

For a long time it was thought to be unique to humans, but studies soon showed that primates also used tools for various tasks such as cracking open nuts. More recently it has been revealed that a variety of birds also manufacture and use tools (eg New Caledonian crows), which suggests that tool use in animals may be more common that once thought. Adding fish to this list of animals gives researchers new insight into the evolution of tool use among vertebrate.

"We really need to spend more time looking underwater to find out just how common tool use is in marine fishes," says Dr. Brown, "It is likely that further examples will continue to be unveiled."

Provided by Macquarie University

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