

# 'Squeaker' catfish communicate across generations

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This is an auditory evoked potential recording. Credit: Lechner et al., *BMC Biology*

It has been thought that young fish, lacking well-developed hearing organs, could not perceive the sounds made by their larger, older relatives. Now, researchers writing in the open access journal *BMC Biology* have used a combined fish tank and sound-proof chamber to show for the first time that catfish of all ages can communicate with one another.

Walter Lechner and a team of researchers from the University of Vienna studied the [catfish](#) *Synodontis schoutedeni*, which, by rubbing the spines of its pectoral fins into grooves on its shoulder, is able to create a 'squeaking' sound. He said, "This study is the first to demonstrate that

absolute hearing sensitivity changes as catfish grow up. This contrasts with prior studies on the closely related [goldfish](#) and [zebrafish](#), in which no such change could be observed. Furthermore, *S. schoutedeni* can detect sounds at all stages of development, again contrasting with previous findings".

The catfish use the squeaking sound to warn of predators and during competition between members of the species. By investigating the animals in specially modified tanks, Lechner and his colleagues were able to record the sounds made and perceived by fish of various sizes, from very young to adult. He said, "We found that as fish get larger, the sounds they make increase in level and duration. [Hearing](#) sensitivities increase with growth, but even the youngest fish are capable of communicating over short distances".



This is a *Synodontis schoutedeni* catfish. Credit: Oliver Drescher

**More information:** Ontogenetic development of auditory sensitivity and sound production in the squeaker catfish *Synodontis schoutedeni*, Walter Lechner, Lidia Eva Wysocki and Friedrich Ladich, *BMC Biology*, [www.biomedcentral.com/bmcbiol/](http://www.biomedcentral.com/bmcbiol/)

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