

Denialism and muddying the water or organized skepticism and clarity? THAT is the question

Commentary on [Sneddon et al.](#) on *Sentience Denial*

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Abstract: The research being commented on here has been criticized and defended in journals. Sneddon et al. (2018) add nothing substantive. We have nothing further to add. Readers are referred to Diggles (2018) and to Browman et al. (2018) for a detailed assessment.

Keywords: anthropomorphism, crustacea, fish, misrepresentation, nociception, pain, skepticism

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“The improver of natural knowledge absolutely refuses to acknowledge authority, as such. For him, scepticism is the highest of duties; blind faith the one unpardonable sin.” (T.H. Huxley 1866)

High scientific standards dictate that research is properly designed, implemented without artefact, interpreted conservatively without spin (Boutron and Ravaud 2018) and replicable by others. To ensure that this is the case, all research must be able to withstand close scrutiny, in the form of organized skepticism (Huxley 1866; May 2011). Organized scepticism is a norm of science and should not be misconstrued or misrepresented as anything other than an integral aspect of the scientific method.

The body of research that Sneddon et al. (2018) defend has been subjected to organized skepticism – and defended – in the journals in which the original articles were published. In our view, Sneddon et al. add nothing substantive to those earlier exchanges beyond framing our valid criticisms as denialism and obfuscation (Jacquet 2018). We therefore have nothing further to say about the specifics they raise. Rather, we refer readers to Diggles (2018) for a detailed assessment of the research available to inform aquatic crustacean welfare, and to Browman et al. (2018) for a general treatment of the broader issues surrounding aquatic animal welfare, including the need for organized skepticism.

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