



What might decapod sentience mean for policy, practice, and public?

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Commentary on [Crump et al](#) on *Decapod Sentience*

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**Abstract:** Crump et al. provide eight criteria for evaluating sentience in decapods, with scope for application to other taxa. Their work has attracted the interest of policymakers. This commentary discusses the limitations of conceptual and legal acknowledgement of sentience in changing practice and public attitudes. More work is needed. Social science may be able to help.

[Richard Gorman](#) is an interdisciplinary social scientist with a focus on how people's cultural, ethical, and emotional relationships with animals can produce complex policy relating human and animal care. In previous work he has explored animal-therapies, and the ethics of using horseshoe crab blood within pharmaceutical practices. [Website](#)



Crump et al. (2022) have provided a selection of criteria for attributing sentience in decapod crustaceans. There are complexities and uncertainties here, but as the authors note:

*“[D]emanding certainty is inappropriate. If severe welfare risks are present, then (for ethical reasons) we must act on evidence that strongly supports attributions of sentience without providing certainty”.*

Crump et al.'s framework has eight criteria for evaluating scientific evidence of sentience built on the highly influential Smith & Boyd (1991) criteria for pain experience, but extended to invertebrates. The true value of their framework may only become apparent when set against applications to other taxa. At the same time, other orders of arthropods must not be forgotten, including the sadly misnamed 'horseshoe crabs', who belong to the order Xiphosura, yet whose use and harvesting props up a large aspect of contemporary biomedicine (Gorman, 2020). Here, much research will run into the barriers that Crump et al. discovered in finding enough studies to review for certain criteria. This is perhaps one of the major challenges to their framework. Yet, as Birch (2022) notes:

*“[P]ublic policy decisions involving animals are extremely grave, with very high stakes. When the stakes are that high, it can be a serious mistake to delay decision-making to wait for more evidence to arrive.”*

The reference to the public nature of this topic is a reminder that controversies over sentience do not take place only within a scientific context. They involve other stakeholders and forms of expertise: policy-makers, industry, media, and members of relevant communities. As Drinkwater et al. (2019) have warned, there are risks when different ethical expectations exist between scientific communities and public groups.

The target article needs to be considered in its wider context and impact, as a recommendation that decapod crustaceans be regarded as sentient animals for the purposes of UK animal welfare laws (Birch et al., 2021). As Crump et al. point out:

*“One of our central recommendations was implemented in the recent Animal Welfare (Sentience) Act 2022, which explicitly includes cephalopod molluscs and decapod crustaceans, and places policymakers under a duty to pay “all due regard” for their welfare”*

They go on to note, however, the UK decision to legally recognize decapod crustaceans and cephalopod molluscs as sentient beings,

*“[W]ill not affect any existing legislation or industry practices such as fishing. There will be no direct impact on the shellfish catching or restaurant industry. Instead, it is designed to ensure animal welfare is well considered in future decision-making.” (GOV.UK, 2021)*

Schnell et al. (2021) point out that this means ‘procedures like boiling lobsters, asphyxiating octopuses and dismembering crabs will still continue’ in the UK. This highlights some of the limitations of conceptual (and even legal) recognition of sentience when it comes to practical implementation. It raises the question of what the discussions of sentience are achieving, who is listening, and how evidence can be translated into practice. This is not to diminish the importance of Crump et al.’s work, which has brought the question about invertebrate sentience to the foreground, and into the public domain. The challenge concerns where these conversations can go next, *who* is to be involved. For example, animal welfare organizations such as [Crustacean Compassion](#) have played a great role too, in raising public awareness and calling on governmental bodies to commission reviews into the evidence of sentience in cephalopod molluscs and decapod crustaceans (Carder, 2017; Rowe, 2018; Tomlinson, 2018).

There is clearly scope for contributions from social scientists to contribute to the process that Crump et al. have begun. Social science can be helpful as a way to understand how and why decapod crustaceans are – as Crump et al. note – a controversial candidate. The ‘Laboratory Animals in the Social Sciences and Humanities’ network (Davies et al., 2016) and ‘Animal Research Nexus’ project (Davies et al., 2020) have demonstrated the value of humanities and social science in understanding how and why concepts and ideas about welfare and sentience can (fail to) be put into practice. The social context of science influences which facts are readily accepted and which are contested. Social scientists can offer insights into public and stakeholder engagement in decapod sentience and what a legal definition of sentience might mean for industry.

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