

**ICES CM 2016/B:500**

**Risks associated with cognitive biases in fisheries management and policy making.**

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This is a discussion paper which aims to examine the downstream implications of irrationality and hidden biases in fisheries management.

Behavioural and experimental economists have discovered and demonstrated numerous cognitive biases and sources of irrationality in human decision-making. Some of these include confirmation bias, belief bias, the false consensus effect and wishful thinking. For scientists in particular some of these findings may challenge the epistemological foundation of their work process.

This theme session explores for the first time the extent of some of these biases and irrational thought processes among the fisheries science community. If we assume that these effects are as prevalent as has been found in other groups what might the implications be for fisheries management?

What are the epistemological, methodological and practical implications if we find that fisheries scientists are not as objective and rational as they may like to believe?

What are the implications for fishers if their experience-based viewpoint, which can be described as naïve or common-sense realism and which may contain significant irrational elements, is challenged?

I also take a more detailed look at a specific example of how assumptions about underlying motivational drivers play out in fisheries policy making. Previous research has shown that fishers in surveys strongly prioritise social or community aspects of fisheries management. Yet in real world decision-making scenarios they may act (sometimes reluctantly) in a more conventional self-interested manner. I examine whether this is because they really conform to the classical rational utility maximising model or because policies based on this model do not provide them with any alternative choices.

**Keywords:** Cognitive biases, Irrationality, Mental models, Fisheries Policy, Uncertainty, Transparency

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