

Judging jellyfish: factors influencing the perception on jellyfish and their blooms

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During the last decades, the number of reports on invasions and blooms of jellyfish has increased, both in the scientific literature and the general media. As extended time series are lacking, no clarity exists on whether the gelatinous zooplankton is really increasing or whether this is just a perception. Moreover, it is not clear how this 'jellification' is perceived by the public and how the media influences this perception. Public perception is a key driver in policy decisions, e.g. on coastal zone governance and research funding. Therefore, it is useful to investigate the variability in public perception and the relationship between the media and the public perception. For this case study we performed a questionnaire survey and a thorough media search regarding the perception on jellyfish and the consequences of jellyfish blooms along the Belgian coast. The results indicate that public perception is only partly driven by the press when it comes to jellyfish. Personal experience seems to be an equally important driver. Additionally, a substantial variation exists in jellyfish perception illustrated by the differences in perception between beach tourists and divers. The lack of knowledge about different jellyfish species (e.g. harmless vs. stinging species) turned out to be a key issue in the wider public perception. Both the variability in perception and the limited species knowledge should be taken into account when incorporating the present and future jellification problems in integrated coastal zone management. At first instance, the perception surveys should be extended to all users of the sea and the coastal zone, which are either directly or indirectly affected by the presence of jellyfish. This can lead to opportunities for a broad cooperation between scientists, policymakers and public parties in the form of 'citizen science'. Secondly, management actions concerning jellyfish increases should include the provision of species-specific information, for example by distributing leaflets and putting up warning boards on the beach. This will likely result in a better acceptance/knowledge of jellyfish and jellification, a better communication between scientists and the public, and a higher quality of data in citizen science programs. Although communication about jellyfish is mainly a coping strategy, it can also contribute to the development and implementation of mitigating strategies. Given the transboundary nature of the problem, such strategies should be implemented on an international level and should address all underlying causes, as was indicated by the survey results.