

Jellypress & jellyperception

Vandendriessche Sofie¹, Lies Vansteenbrugge^{1, 2} and Kris Hostens¹

¹ Institute for Agricultural and Fisheries Research (ILVO), Animal Science Unit, Aquatic Environment and Quality, Bio-environmental Research Group, Ankerstraat 1, 8400 Oostende, Belgium

² Ghent University (UGent), Biology Department, Marine Biology Section, Sterre Campus, Krijgslaan 281 - S8, 9000 Gent, Belgium

One of the objectives of the MEMO-project (INTERREG Iva 2 Seas) is the evaluation of the socio-economic effects of the introduction and presence of the non-indigenous ctenophore *Mnemiopsis leidyi*. Among the most immediate and obvious effects are the potential harm to the fisheries industry and the deterioration of recreational quality. For these stakeholders, MEMO partners elucidated how they are affected by jellyfish in general, how they perceive the problem, and how they manage to avoid negative impacts.

In this study, we focused on the perception of jellyfish (including ctenophores) in general and of *M. leidyi* in particular by the tourist sector and by fishermen in Belgium. We gathered data using questionnaires that were distributed physically (field survey) and digitally (e-mail survey). Additionally, we did a media search concerning jellyfish articles in newspapers to check whether media impressions correspond with the survey results.

The results of a survey among beach tourists show that tourists are not much bothered with jellyfish unless they already got stung. Most people are very cautious, since they do not know whether the species in question is capable of stinging. When children are involved, tourists do not take risks and avoid contact with jellyfish at all cost. People would like to be informed by experts about the risks of the jellyfish they could encounter. Another issue is the sight and smell of larger jellyfish washed ashore, which is considered to be unpleasant. In the case of *M. leidyi*, there is no risk of stings and the individuals are small and inconspicuous when washed ashore. Hence, beach tourists are largely unaware of its presence. This is not the case for divers who know the different jellyfish species and their distribution well. In short, the response to jellyfish differs substantially between tourist sectors. Fishermen do not perceive jellyfish as a problem, unless they are large (e.g. *Rhizostoma* sp.) or unless they sting (e.g. *Chrysaora* sp.).

The media search showed that jellyfish get more and more attention, with an emphasis on blooms and threats worldwide. For *M. leidyi*, the amount of press attention does not correspond with the public perception.

These insights into the perception of jellyfish presence and impacts by different stakeholders can contribute to the incorporation of jellyfish as a factor in the process of integrated coastal zone management.