

Are anti-jellyfish nets a useful mitigation tool for coastal tourism? Hindsight from the MED-JELLYRISK experience

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The mitigation of coastal hazards, notably jellyfish blooms, has assumed great significance in recent years in view of the potential detrimental impact of such hazards on the welfare of coastal communities. This is especially true in a basin such as the Mediterranean with a very high degree of coastal settlement and dependence on coastal economic activities. Within the MED-JELLYRISK project and over the course of two summers (2014 and 2015), a total of 15 anti-jellyfish nets within several Mediterranean tourist hotspots were installed in Italy (islands of Lipari, Salina, Ustica, Lampedusa and Favignana), Spain (two beaches on the island of Ibiza), Tunisia (beaches at Monastir and Hammamet) and Malta. Manufactured in 25m-long modules, the nets were specifically designed to exclude individuals of jellyfish species from the enclosed bathing areas, and were installed on shallow sandy and rocky bottoms from the coastal fringe down to a water depth of 2.5m. The performance of the same nets was monitored through scientific surveys inside and outside the net-enclosed areas. In parallel, the colonization of fouling organisms on the submerged sections of the nets was investigated, and the public perception of the installed nets was assessed through ad hoc questionnaires deployed on the beaches. Useful hindsight for coastal managers, concerning best sites and conditions for deployment, net design and materials, has been gained from this experimental anti-jellyfish net deployment effort within the MED-JELLYRISK project.

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