

Little mermaid and plastic sea monsters help raise awareness about marine debris in ocean action campaign

José Teixeira, Ágatha Gil, Patrícia Neto

CIIMAR, Interdisciplinary Centre of Marine and Environmental Research of University of Porto,
Terminal de Cruzeiros do Porto de Leixões, Avenida General Norton de Matos, S/N 4450-208
Matosinhos, Portugal
E-mail: jose.teixeira@ciimar.up.pt

More than 8 million tons of plastic reach annually the ocean, transported from land by rivers, sewers, by air or deposited on beaches. The plastic can last for hundreds of years in the ocean, just breaking into successively smaller pieces. This huge amount of plastic is causing very significant negative impacts on marine life, economic activities and human health (accumulation of contaminants in marine food).

It is estimated that about 2 million marine animals (birds, fish, turtles, cetaceans) die every year due to the intake and entangling in this trash. Sea turtles, for example, easily mistake plastic bags floating with its main food – jellyfish. Any plastic intake can lead to death due to digestive obstruction or suffocation. The impacts of this waste also include bioaccumulation of contaminants in animals due to microplastics ingestion, destruction of habitats and transport of invasive species. Ocean Action Campaign invested in different communication tools to address and raise awareness of school community and general public about the problem of marine debris, particularly plastic waste in the ocean.

The exhibition "A Plastic Ocean", spread three large sculptures constructed in partnership with ESAP (Artistic School of Oporto) with plastic discarded throughout different public spaces of the Porto city. The sculptures, depict different consequences of plastic debris on marine life and human health. An itinerant exhibition focus on using strong visual and sensory objects to attract the attention of visitors, alternating panels with essentially graphic information (infographics and illustration) with art objects and multimedia elements. An original theatre piece "Pearl in Plastic Sea" was also developed by ESAP to explore the marine litter problem and its consequences for biodiversity and the marine ecosystem by recreating the story of the little mermaid, an adventure fraught with danger due to the ever increasing garbage that reaches the sea.

The Campaign Ocean Action, financed by the EEA Grants, also includes more conventional hands on science activities and lectures in schools, beach cleaning activities, a student's contest and the production of educational videos.

All different communication methods aimed to encourage the critical reflection about this environmental problem of great importance and scientific complexity and the need to adopt environmentally responsible behavior by the population through the use of complementary, artistic and innovative approaches.