

Reducing Microplastics in the Mediterranean Sea

A project by the Water People Expedition with The Lighthouse Foundation

FINAL NARRATIVE REPORT

The Issue

The Mediterranean Sea is one of the world's worst affected bodies of water when it comes to plastic pollution. The high population density, coastal urban development, together with it being the world's most popular tourist area, leads to significant plastic waste production and disposal. High levels of land-based agriculture, fisheries, and marine traffic all supplement the levels of plastic pollution. The Mediterranean is a semi-enclosed sea, meaning it has limited water exchange with the open ocean. This geographic feature causes microplastics to accumulate within the basin rather than dispersing into larger bodies of water. Plastic production has a high carbon footprint contributing to climate change and plastic waste has damaging effects to organisms and ecosystems. With plastic use projected to triple between 2019 and 2060 it seems increasingly urgent to tackle the problem with a multi-faceted approach.

Objectives and methods

The *Water People Expedition* is a global ocean quest with the mission of creating and sharing original multimedia to advocate for the protection of marine and coastal environments. By using high quality visuals and inspiring adventure the goal is to drive engagement and impact on critical environmental topics encountered by way of the journey itself. In its first year the expedition catamaran would traverse much of the Mediterranean Sea from east to west and it therefore offered an ideal storytelling platform for such a pressing issue as plastics pollution. Captain and crew, Tim Burgess and Michelle Nieuwenhuizen, are a professional filmmaker and photographer respectively, and the aim of this project was to create a short film for online social platforms which communicated the issue. Additionally, a dedicated project web page would offer an achievable action plan for the audience and more clarification on typical questions such as:

- what are microplastics, and what danger do they pose?
- where does plastic pollution come from?
- what sort of solutions are suggested by science?

Film synopsis

Sailing west in the Mediterranean the expedition crew Tim and Mitch come across a lot of plastic pollution. Concerned and eager to understand it better they reach out to marine biologist Sergio Ruiz-Halpern of Save The Med foundation. He confirms the severity of the problem, and says that there is much more going unseen. Using a manta trawl device towed behind expedition vessel, the water is filtered and Sergio allows the crew to witness microplastics firsthand. Tim and Mitch are shaken into action — forced to consider the situation in the environment around them and to question their own lifestyle practices. "Are we doing enough to minimise the amount of plastic we are using? Are we recycling everything that can be recycled? And our clothes, are they made from natural fibres? And, most of all, are we making our voices heard to government and industry?"

Sources of plastic pollution particularly affecting the Mediterranean are outlined, including unprotected landfill sites, tourism zones, use of synthetic clothing, tyre dust, degraded plastics from agriculture, ghost fishing gear, and spills of plastic pellets.

The audience is encouraged to take action by signing a petition for a strong Global Plastic Treaty and to undertake an action plan such as that created on the accompanying web page.

The project results will be distributed for impact through the social channels of the Water People Expedition and various third-party media platforms.