

# Floating marine macrolitter between Sicily and Tunisia: results of a pilot survey

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Both in the EU Marine Strategy Framework Directive and in the Barcelona Convention Ecosystem Approach (EcAp) there is the requirement to monitor that properties and quantities of marine litter do not cause harm to the coastal and marine environment and specific target have been established to reach the good ecological status of the marine waters. In addition marine macropollution (such as plastic bags, styrofoam) is considered into the Habitat Directive Reports (art. 17) one of the main pressure and threats (H03.03) for marine mammals and turtles.

Monitoring methods should be consistent across the marine region and relevant transboundary impacts should be taken into account. In addition States should establish and implement coordinated monitoring programmes. For this reason, within the framework of an ACCOBAMS co-funded project, the monitoring of the abundance, composition and distribution of marine macrolitter (items greater than 20cm) that floats in the waters between Sicily and Tunisia in the Sicilian Channel/Tunisian plateau was undertaken by research bodies of the two countries. Macrolitter is a direct indicator of litter that gets into the sea; it can impact marine life as animals can be entangled or can ingest floating plastic. Monitoring with visual surveys was undertaken from ferries allowing dedicated researchers to repeatedly sample the same transect (the route) also in high sea areas, which are usually difficult to reach with smaller vessels. The litter systematic monitoring protocol from ferries was specifically developed by an international network, coordinated by ISPRA, that monitors in the Mediterranean Sea cetaceans and their associated threats, litter categories were taken from the EU/JRC Guidance. Considering the importance of the region for the fishing industry special care was undertaken for the monitoring of derelict floating fishing gear and drifting/lost FADs.

Based on approx. 400 km of effort (5 samples), results showed that density in nearby port/costal region was  $2,5 \pm 0,3$  items·km<sup>-2</sup> (with most of the items on the Tunisian coast) while values in high sea areas were 5 times less. Most of the items were artificial polymers (>70%) followed by processed wood (several board/beams larger than 50cm). One floating derelict net was recorded while no object resembling FADs were detected.

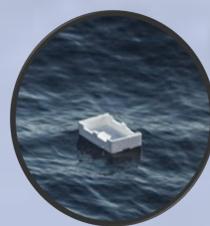
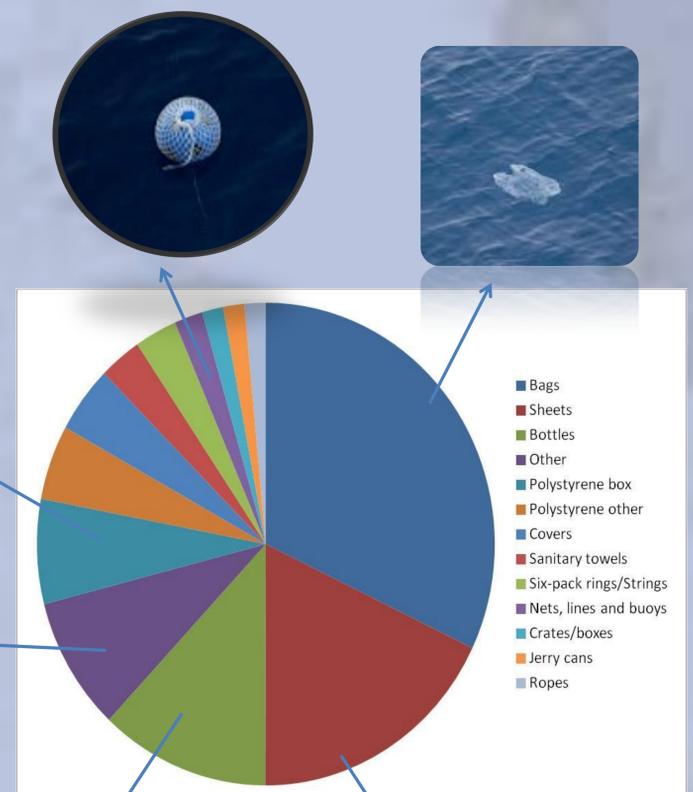
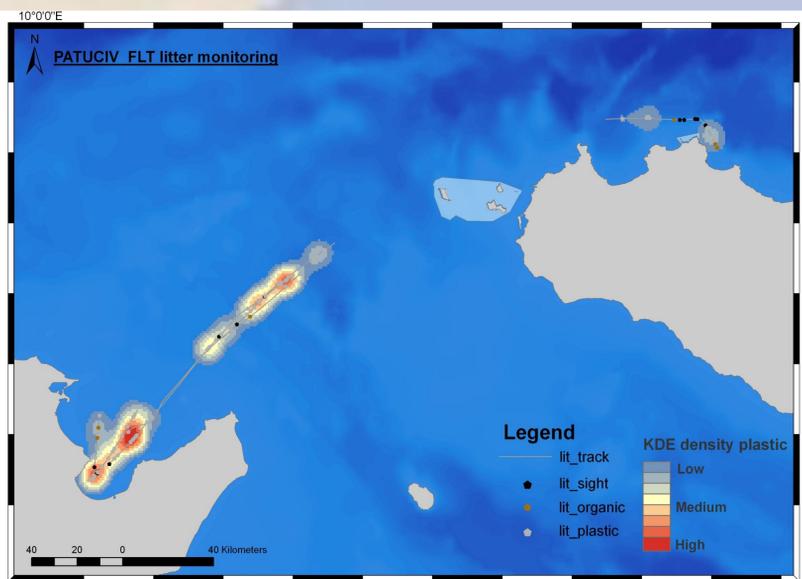
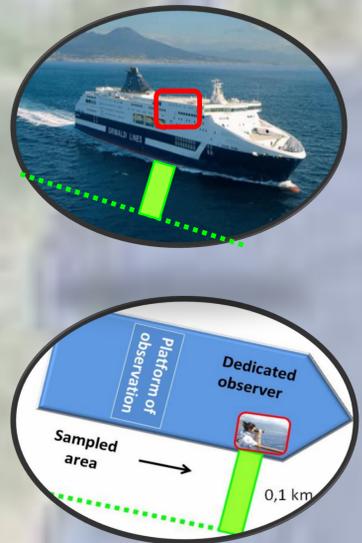


Foto by Luca Marino



The monitoring of the area is just at its early stage, however future systematic surveys will set up an important baseline on the quantity of macrolitter/drifting fishing gear present in the region also allowing to evaluate the capacity of measures enforced to reduce waste ending up in the sea.