{rokbox title=|Map of the study area indicating the location of the samples for microplastic and macro litter surveys :: Image: Authors|
thumb=|images/stories/ieo/imagenespublicaciones/centro-oceanografico-baleares-ieo-csic-surveys-microplastic-coastal-waters-cabrera-compa-et-al-2023-thumb.jpg|}images/stories/ieo/imagenespublicaciones/centro-oceanografico-baleares-ieo-csic-surveys-microplastic-coastal-waters-cabrera-compa-et-al-2023.jpg{/rokbox}

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Sea surface surveys for microplastic and floating marine macro litter items in coastal waters of Cabrera Archipelago Maritime Terrestrial National Park.
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Abstract: This study is aimed at identifying and comparing microplastics and floating marine litter along the sea surface in the marine protected area of Cabrera Archipelago Maritime Terrestrial National Park (Cabrera MPA) in the Balearic Islands. A total of 52 net surveys and 22 visual surveys were carried out between July and August in 2019 and 2020. The abundance of microplastic (MP) items was highest in the southern and eastern regions, with an average of 381,244.4 ± 1,031,082.8 items/km2 weighing an average of 927.1 ± 2731.4 g/km2. Most of these items were minor than 5 mm (81%) in size and were mainly composed of polyethylene and polypropylene (98%). In terms of floating marine macro litter (ML) from visual surveys, an average of 2028 ± 2084 items/km2 were observed. In this case, the majority of the ML items were plastic pieces (69%) measuring 2.5 to 50 cm. Furthermore, ML quantified by visual surveys was an order of magnitude higher than in similar studies carried out on large vessels, highlighting the importance of vessel height and speed for identifying the smallest size fractions (81%). The results of this study document the intensity of MPs and ML, primarily plastic, in coastal waters, and provide a baseline for management efforts to mitigate floating litter, in addition to raising awareness of the transferability of marine litter from other regions.

Keywords: Floating plastic litter, Microplastics, Spatial distribution, Marine protected area, Western Mediterranean Sea