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Montserrat Compa, Carme Alomar, Mercè Morató, Elvira Álvarez, Salud Deudero, 2022.

[Are the seafloors of marine protected areas sinks for marine litter? Composition and spatial distribution in Cabrera National Park.](https://doi.org/10.1016/j.scitotenv.2022.152915)

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Abstract: The seafloors of oceans and seas are becoming major sinks for marine litter (ML) at a global scale and especially within the Mediterranean Sea. Within global oceans and seas, Marine Protected Areas (MPAs) have been established to protect and conserve marine habitats and increase marine biodiversity. In this study, extensive coastal shallow scuba diving surveys were conducted in 2019 and 2020 to identify the distribution of ML in the MPA of Cabrera Marine-Terrestrial National Park (Cabrera MPA) in the Balearic Islands. Approximately 900 items weighing 70.1 kg were collected throughout the MPA during the underwater surveys. Glass bottles, including pieces (25–30%) and glass or ceramic fragments >2.5 cm (8–19%) were the most common identified items followed by plastic food containers and plastic bags (~8%). Overall, 75% of the abundance of collected ML was observed during the first year. In terms of the protection status of the different locations, similar abundances of ML were found in public access areas and no-take areas. Additionally, no significant differences were identified according to location indicating that ML on the seafloor was homogeneous within the studied shallow coastal areas. Overall, the results indicate that Cabrera MPA is a hotspot for ML and mitigation actions and measures, such as annual cleaning efforts, can help to prevent and minimize ML accumulation on the seafloor.

Keywords: Marine litter, Plastic pollution, Marine protected areas, Scuba diving, Conservation