Abstract: Marine Protected Areas (MPAs) are managed to conserve ecosystems however increased reporting highlights the observations of marine debris within these areas. The coastline of Cabrera Natural Park (Cabrera MPA) was surveyed in February, March, May, and July of 2021 to evaluate the seasonal trend of marine debris between winter and summer months. A general value of 6.94 items/km, ranging from 4.38 ± 4.55 items/km in July to 12.57 ± 17.56 items/km in March, was detected with no statistical differences between areas or surveyed months. Abundance of stranded debris (77 %) was statistically higher than floating debris (23 %). Prevailed floating plastic pieces 2.5 > minor than 50 cm and stranded nets and pieces of nets >50 cm. Artificial polymer materials, non-sourced debris, and non-Single Use Plastics were the most common items identified. This study highlights the importance of applying mitigation measures to avoid the presence of marine debris in areas of ecological interest.

Keywords: Marine protected area. Western Mediterranean Sea, Conservation, Sources