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MACROLITTER AMOUNTS AND COMPOSITION ON REMOTE BEACHES IN THE NE BALTIC SEA REGION

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Abstract
Marine macrolitter surveys were carried out on 14 small uninhabited islands located in the coastal waters of Estonia, northeastern Baltic Sea. Islands were visited four times in total during the years 2019-2020. Calculated over all conducted surveys the median value of macrolitter items per 100 m long beach section was 10.65 and the median density was 0.006 items m^{-2}. On sub-basin level the islands located in the Gulf of Finland had the highest number of beach litter items per 100 m and density (items m^{-2}), accordingly 38.05 and 0.017. The main litter material was plastic followed by glass and ceramics and processed wood; however, there were some variances across islands due to the local conditions. The environmental variables best explaining differences of the composition of macrolitter were water current velocity, water depth, and water orbital velocity. Litter items as nest material were noted for all the islands with seabird colonies.

Keywords: marine litter, beach litter, remote areas, islands, visual surveys

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