

Analysis performed by Cedre (France) and validated by the OSPAR Beach Litter Expert Group

Data source: OSPAR beach litter monitoring (<https://beachlitter.ospar.org/>)

Reporting period: 2018-2020 (3 years)

Number of sites and surveys: 33 sites, 326 surveys

Calculation tools: LitterR package and Excel

Data format: OSPAR beach litter reference list, version 2010

Assessment method: CEMP Guidelines (<https://www.ospar.org/work-areas/cross-cutting-issues/cemp/>); mesoplastic fragments (plastic fragments < 2.5 cm) are excluded



Litter abundance

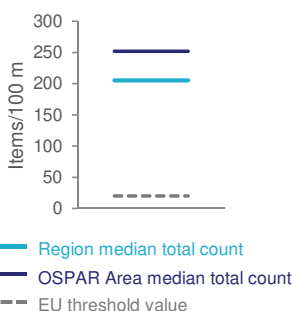
Abundance

672585 items collected

Median total count: 205 items/100 m

A reduction of the median total count is required to achieve EU threshold value of 20 litter items/100 m.

Position in OSPAR Area



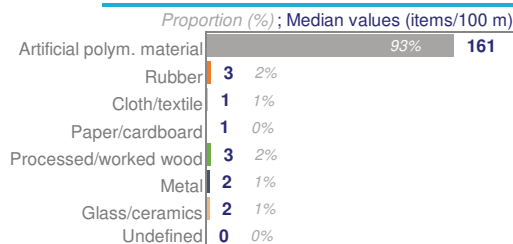
Spatial distribution

Medians of survey sites

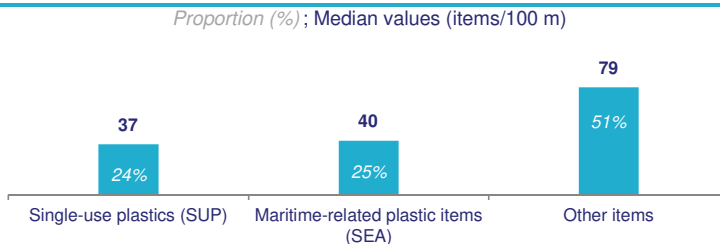


Litter composition

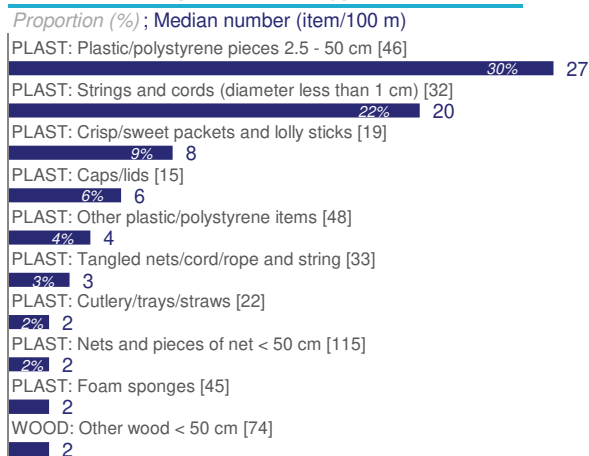
Material composition



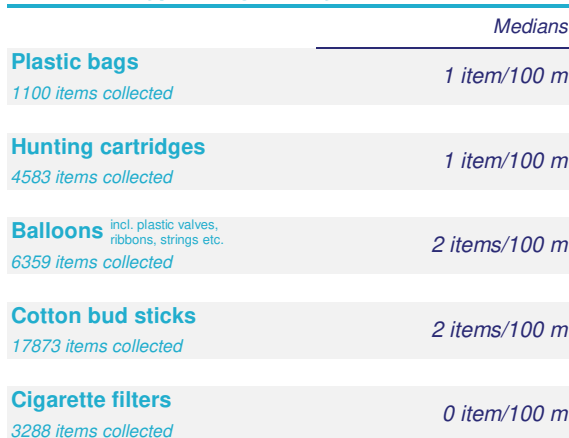
Use categories



Top 10 of litter types

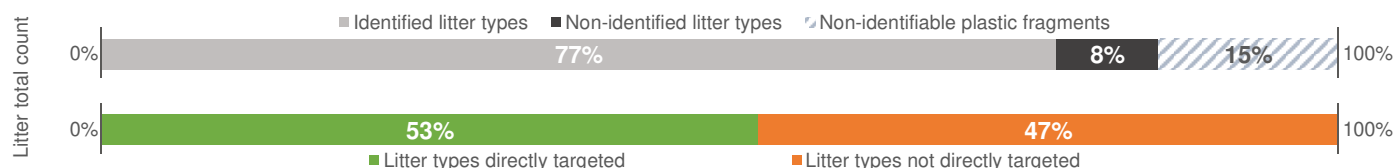


Litter types targeted by RAP measures



Assessment of survey list adequacy and measures coverage

Types of surveyed items



Part of items targeted by measures
(ML RAP 2014-2020 and Directive EU 2019/904)

Analysis performed by Cedre (France) for the OSPAR Beach Litter Expert Group

Data source: OSPAR beach litter monitoring (<https://beachlitter.ospar.org/>)

Reporting period: 2015-2020 (6 years)

Number of sites and surveys: 27 sites, 527 surveys

Calculation tools: Litter package of R and Excel

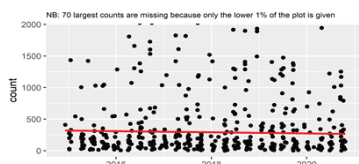
Data format: OSPAR beach litter reference list, version 2010

Assessment method: CEMP Guidelines (<https://www.ospar.org/work-areas/cross-cutting-issues/cemp>); mesoplastic fragments (plastic fragments < 2.5 cm) are excluded



Trends in total count

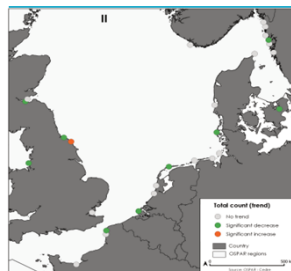
Region level



2015-2020: **Significant decrease**

Slope: -9 items/100 m per year
p-value: 0.000

Site level



Trends over 2015-2020

- Significant decrease
- Significant increase
- No trend

Trends for categories of interest

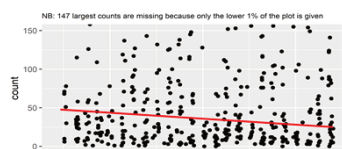
Artificial polymer materials (plastics)



2015-2020: **Significant decrease**

Slope: -8 items/100 m per year
p-value: 0.000

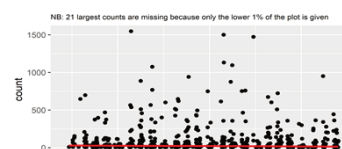
Single-use plastics



2015-2020: **Significant decrease**

Slope: -4 items/100 m per year
p-value: 0.000

Maritime-related plastic items

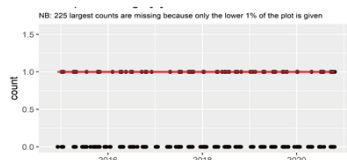


2015-2020: **Significant decrease**

Slope: -2 items/100 m per year
p-value: 0.000

Trends for litter types targeted by RAP measures

Plastic bags



2015-2020: **No trend**

Slope: 0 item/100 m per year
p-value: 0.061

Hunting cartridges

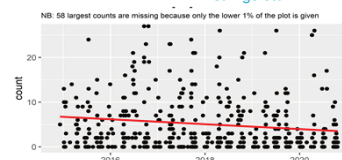


2015-2020: **No trend**

Slope: 0 item/100 m per year
p-value: 0.015

Balloons

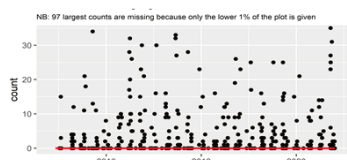
incl. plastic valves, ribbons, strings etc.



2015-2020: **Significant decrease**

Slope: -1 item/100 m per year
p-value: 0.000

Cotton bud sticks



2015-2020: **No trend**

Slope: 0 item/100 m per year
p-value: 0.183

Cigarette filters



2015-2020: **No trend**

Slope: 0 item/100 m per year
p-value: 0.708

- Count of litter items per survey
- Theil-Sen trend line

Key message

Beach litter is abundant on survey sites in the OSPAR Region Greater North Sea, with a median total count of 205 items/100 m.

Plastic material is predominant, representing 93% of the beach litter items recorded, with a median of 161 items/100 m.

SUP and SEA use categories appear to contribute to the pollution with medians of 37 items/100 m (24%) 40 items/100 m (25%) respectively.

Plastic / polystyrene pieces (27 items/100 m; 30%), strings and cords (20 items/100 m; 22%) and crisp / sweet packets (8 items/100 m; 9%) are abundant litter types.

At least 53% of the recorded items are directly targeted by OSPAR ML RAP 2014-2020 and the SUP Directive.

Only 8% of the litter items are not identified, indicating that the OSPAR survey list adequately covers the litter items recorded.

15% of the litter items are non-identifiable plastic fragments, which cannot be used for the identification of sources of pollution.