OSPAR Region Bay of Biscay and Iberian Coast

BEACH LITTER POLLUTION STATUS (2018-2020)

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: 41 sites, 405 surveys
Calculation tools: LitteR 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

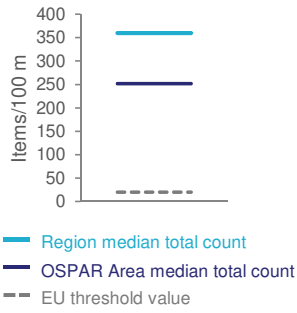
Abundance

197157 items collected

Median total count: 360 items/100 m

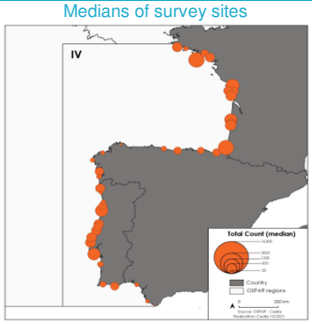
A reduction of the median total count is required to achieve EU threshold value of 20 litter items/100 m.

Position in OSPAR Area



Spatial distribution

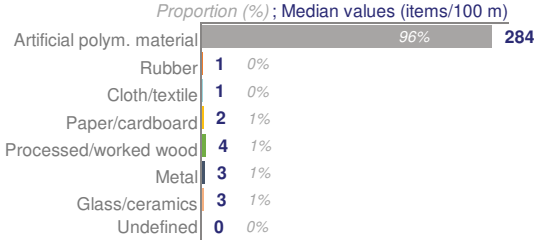
Medians of survey sites



Litter composition

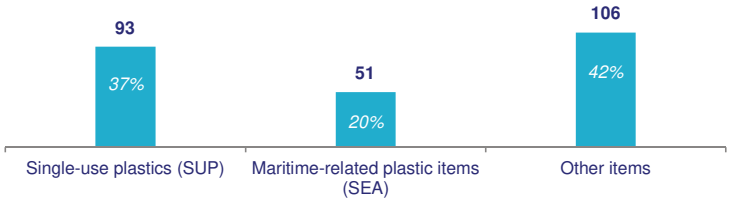
Material composition

Proportion (%); Median values (items/100 m)



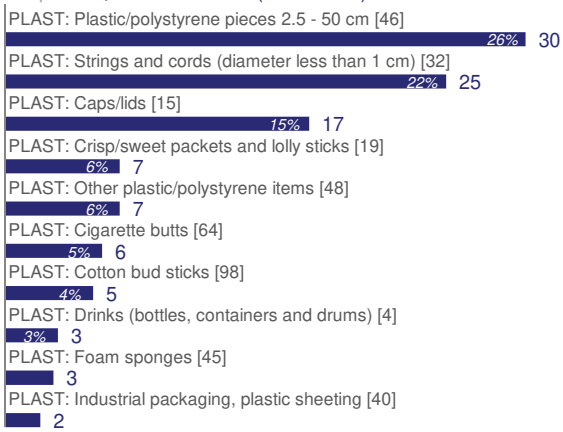
Use categories

Proportion (%); Median values (items/100 m)



Top 10 of litter types

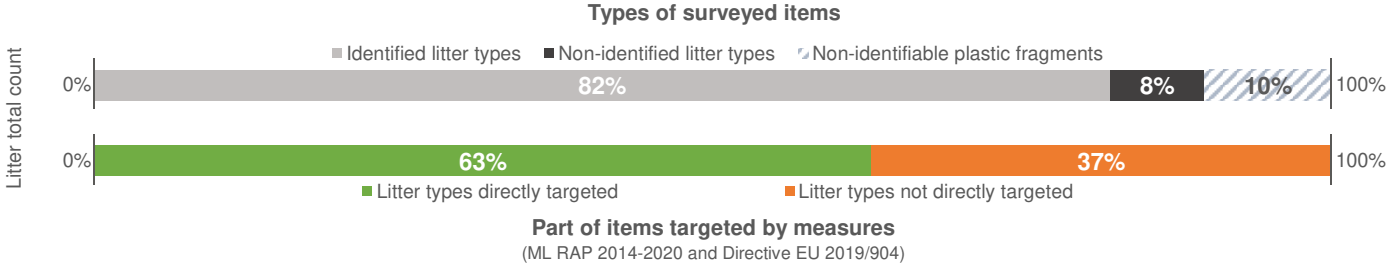
Proportion; Median number (item/100 m)



Litter types targeted by RAP measures

	Medians
Plastic bags *2604 items collected*	*1 item/100 m*
Hunting cartridges *1683 items collected*	*1 item/100 m*
Balloons incl. plastic valves, ribbons, strings etc. *293 items collected*	*0 item/100 m*
Cotton bud sticks *10086 items collected*	*5 items/100 m*
Cigarette filters *19099 items collected*	*6 items/100 m*

Assessment of survey list adequacy and measures coverage



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

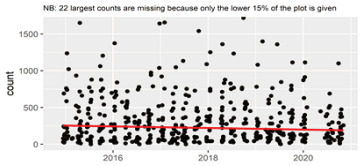
OSPAR Region Bay of Biscay and Iberian Coast

BEACH LITTER POLLUTION TRENDS (2015-2020)

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: 23 sites, 504 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

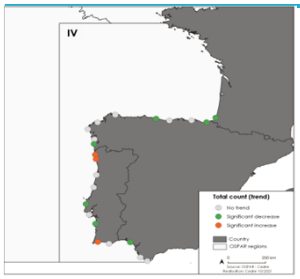
Region level



2015-2020: Significant decrease

Slope: -11 items/100 m per year
p-value: 0.001

Site level

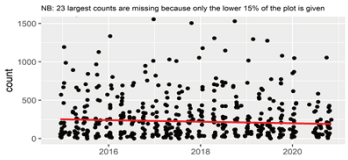


Trends over 2015-2020

- Significant decrease
- Significant increase
- No trend

Trends for categories of interest

Artificial polymer materials (plastics)



2015-2020: **Significant decrease**

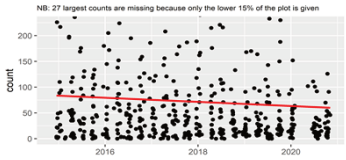
Slope: -11 items/100 m per year
p-value: 0.002

Single-use plastics

2015-2020: **Significant decrease**

Slope: -4 items/100 m per year
p-value: 0.012

Maritime-related plastic items

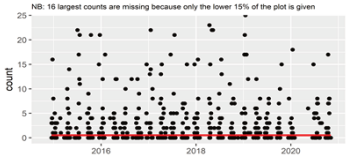


2015-2020: **Significant decrease**

Slope: -4 items/100 m per year
p-value: 0.002

Trends for litter types targeted by RAP measures

Plastic bags



2015-2020: **No trend**

Slope: 0 item/100 m per year
p-value: 0.661

Hunting cartridges

2015-2020: **No trend**

Slope: 0 item/100 m per year
p-value: 0.095

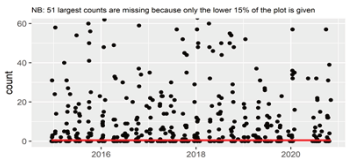
Balloons

incl. plastic valves, ribbons, strings etc.

2015-2020: **No trend**

Slope: 0 item/100 m per year
p-value: 0.089

Cotton bud sticks



2015-2020: **No trend**

Slope: 0 item/100 m per year
p-value: 0.064

Cigarette filters

2015-2020: **No trend**

Slope: 0 item/100 m per year
p-value: 0.538

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

Key message

Beach litter is abundant on survey sites in the OSPAR Region Bay of Biscay and Iberian Coast, with a median total count of 360 items/100 m.
Plastic material is predominant, representing 95% of the beach litter items recorded, with a median of 284 items/100 m.
SUP and SEA use categories appear to contribute to the pollution with medians of 93 items/100 m (37%) 51 items/100 m (20%) respectively.
Plastic / polystyrene pieces (30 items/100 m; 26%), strings and cords (25 items/100 m; 22%) and caps and lids (17 items/100 m; 15%) are abundant litter types.
At least 63% 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.
10% of the litter items are non-identifiable plastic fragments, which cannot be used for the identification of sources of pollution.