

# Stemming the tide of beach litter

September 25 2018

---



Credit: AI-generated image ([disclaimer](#))

Over four fifths of the litter on European beaches is plastic, and over 50 percent is made of single-use plastic, according to a new scientific report.

The European Commission is taking action to stop more plastics from ending up on our beaches. Plastic bottle caps and cigarette butts are among the most common [litter](#) items found on European beaches. Rings

from [plastic bottle](#) caps, crisp packets, sweet wrappers, strings, fragments of [plastic](#) objects and cotton buds also make it to the top ten of most frequently found items.

In the first EU-wide analysis of its kind, JRC scientists compiled information on the most common litter types found on European beaches. They also analysed a dataset on [beach](#) litter collected in 2016 across Europe. The most frequently occurring beach litter items were identified on the basis of 355,671 items collected from 276 European beaches in 679 surveys.

Scientists looked at the litter collected by national and environmental organisations from different parts of Europe, including the North Sea, the Baltic Sea and the Mediterranean. They compared the items and found that often the same items are among the most common beach litter items everywhere in Europe. The top ten types of litter represent approximately 63 percent of the total rubbish found on European beaches.

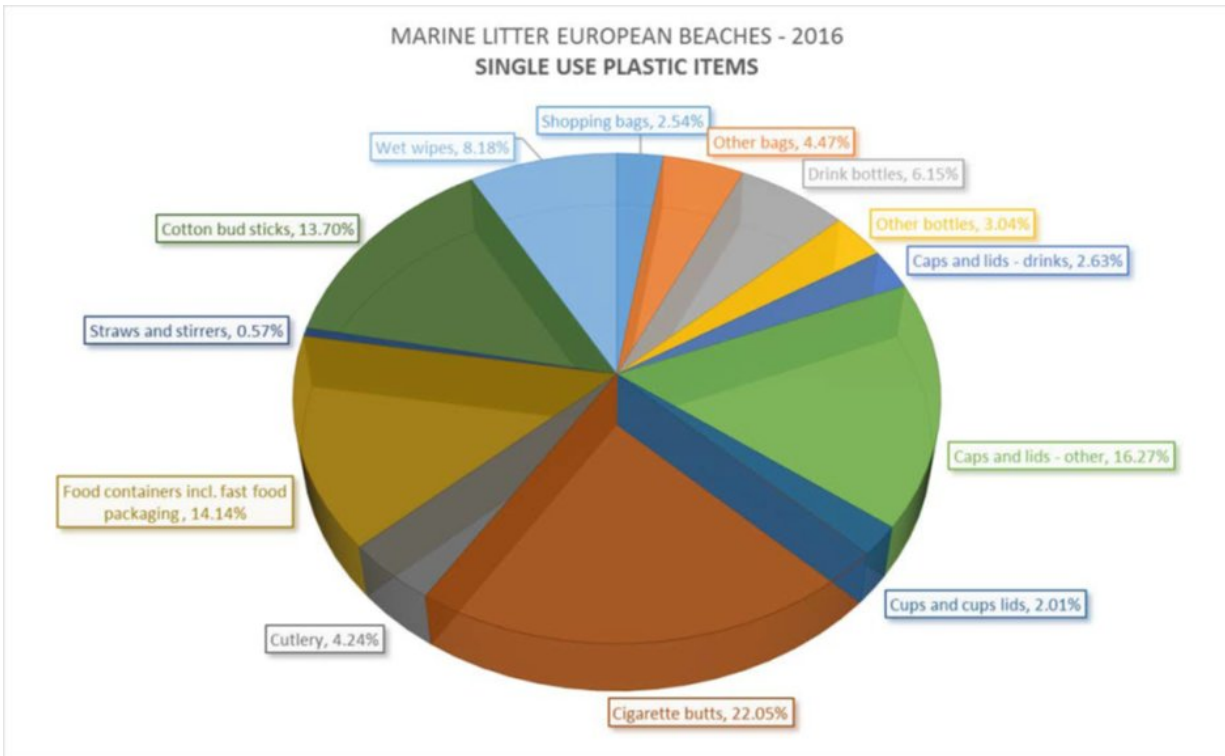
This means that by removing them from our beaches, the overall amount of beach litter could be reduced drastically.

## **Most beach litter is plastic**

The majority – 84 percent – of all the beach rubbish is made of plastic. Single-use-plastics, i.e items that have been designed to be used only once and then thrown away, make up 50 percent of all beach litter. Plastic degrades in the environment into smaller pieces.

These so-called microplastics can be found in the water and inside animals, anywhere from the deep sea to the polar regions. Scientists confirm that the amount of plastic rubbish found on beaches highlight the need for targeted action against this type of litter.

## Fishing items



Marine litter european beaches 2016. Credit: EU 2018

Items linked to fishing activities – abandoned, lost or discarded fishing gear such as nets, fishing lines, buoys – represent another common category of beach litter.

Scientists say it is harder to determine for sure whether certain items, such as strings or cords, come from fishing activities. Fishing lines, nets and other fishing items often remain in the sea and can only be identified by specific techniques which allow searching of the seafloor.

Therefore, researchers estimate the contribution of fishery-related litter

to be anywhere between 3 percent and 15 percent. Fragments of fishing related items, e.g. from styrofoam fish boxes, are not taken into consideration in this calculation.

## **Taking action against beach litter**

The identification of the most common litter items is important for the implementation of the Marine Strategy Framework Directive (MSFD), the EU Plastics Strategy and in general for the prioritisation of measures against marine litter.

The European Strategy for Plastics in a Circular Economy aims to ensure that plastic products are kept in the economy for longer, so as to reduce their burden on the environment. The European Commission has proposed a Directive to reduce the litter stemming from single-use plastics and fishing gear.

The Directive bans some of the most problematic single-use plastics, for which there are already alternatives on the market. It also introduces new requirements in areas such as labelling, reducing consumption, awareness-raising and boosting separate collection.

The idea is to further involve producers in the process through extended responsibility schemes. They include new obligations in areas like awareness-raising and waste collection, with a view to promoting the use of more durable materials like reusable cups, cutlery and food containers, thereby reducing litter.

Work has started on restricting the intentional addition of microplastics to products like cosmetics, paints and detergents.

The Commission has asked the European Chemicals Agency to review the scientific basis for considering a restriction under the EU Regulation

for Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).

A similar approach is also being taken to oxo-degradable plastics. The Commission has also launched a campaign to highlight the role of citizens in the fight against plastic pollution and marine litter, stressing the importance of consumption choices.

It includes a video challenging the idea that single-use plastics are convenient items, social media content presenting the 'seductive' powers of single-use plastic items, and tips and advice on how to resist their powers of attraction.

The JRC Technical Report "Top Marine Beach Litter Items in Europe" describes different beach litter ranking approaches in Europe and compiles a beach litter data set from 2016.

Based on data provided by Member State authorities, regional sea conventions (OSPAR Commission, Barcelona Convention UN Environment/MAP, HELCOM, Black Sea Commission), non-governmental organisations and other national bodies, the report identifies the most abundant items found on the beaches across Europe.

Provided by CORDIS

Citation: Stemming the tide of beach litter (2018, September 25) retrieved 26 April 2024 from <https://phys.org/news/2018-09-stemming-tide-beach-litter.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.