### **OCEAN INITIATIVES**

### **MARINE LITTER**







Marine litter is man-made material or objects that are thrown or discarded voluntarily or involuntarily and which are found in aquatic environments, whether directly or indirectly.



### 80% OF MARINE LITTER COMES FROM INLAND

It is estimated that 70% of this litter ends up sinking and we therefore do not see most of the litter, just as is the case with icebergs. About 15% of litter floats in midwater before ending its journey in areas where waste is accumulated. Only a tiny proportion of waste ends up on our coastlines. A distinction is made between macro-waste and micro-waste (litter of less then 5 millimetres).

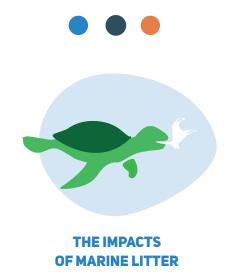
Every second, 206 kg of marine litter is dumped in our seas and oceans and it is all of human origin. The group of experts on marine pollution from the United Nations estimates that 80% of marine litter comes from inland. It is thrown out upstream, in towns or villages, slips through waste collection systems and arrives in the oceans pushed by wind, rain or directly by the waterways.

Rivers and streams are one of the major vehicles for introducing inputs from inland into the marine environment. The remaining 20% of litter is abandoned on the shores or dumped directly in the sea by marine activities (maritime transport, sailing, fishing, oyster farming, nautical activities, etc.).

For many years now, the ocean has been the largest dump for human activity. The exponential increase of aquatic waste is directly linked to our consumption habits. The majority of litter that is found is made of plastic (between 60 and 90%).

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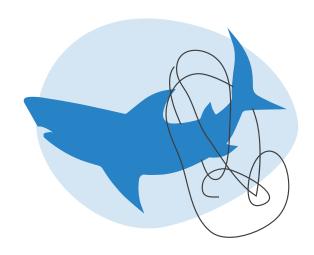
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Marine litter in general and plastics in particular cause a lot of damage to the marine environment: For some species such as turtles or birds, marine litter may represent a major mortality factor. Animals can become entangled in fishing gear or other types of litter. These animals that become caught may die from their injuries, hunger or from becoming easy prey for their predators due to their reduced mobility. Some marine species ingest plastic waste, confusing it with their usual prey, and may be affected by choking problems or intestinal obstruction. For example, turtles may confuse plastic bags with jellyfish.

#### The number of species affected by marine litter has risen from 247 to 663 in 15 years.

Marine litter also causes both harm to humans (hazardousness of waste that is washed up, molecules from plastic litter, etc.) and has an impact on economic activities (loss of tourist appeal of coastal towns, impact on fishing vessels, etc.). It should not be forgotten that coastal municipalities spend a fortune on cleaning beaches strewn with marine litter. Finally, the majority of litter sinks to the bottom of the water, which asphyxiates the seabed by preventing exchanges between the seabed and the water column.





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The specific characteristic of plastic is that it never completely breaks down. As a result of UV rays, currents, waves and salt it breaks up into tiny particles called microplastics. Some microplastics are also introduced directly into the environment (plastic microbeads contained in cosmetics, clothing fibres from water used in washing machines) and are not the remains of larger pieces of litter that have decomposed.

When decomposing, plastic may release toxic substances which enter the marine environment (such as phthalates, biphenyls, which are endocrine disruptors). Plastic litter may also help hydrophobic chemical substances, such as PCB, that are already present in the environment to accumulate.

It may also serve as a vehicle for invasive species which can travel very long distances in this way and may have a major impact on the ecosystems that they colonise.

Moreover, scientists are currently examining the possibility of chemical pollutants being transferred to marine species and, consequently, to humans... If you would like further information on the problem of marine litter, we invite you to visit Surfrider Foundation Europe's BLOG. In order to optimise your search, we advise you to use the search tool on the top right hand side of the page. Examples of key words:

#marinelitter
#biocarrier
#plastic
#clean-up
#awareness-raising

