



# ENVIRONMENTAL REPORT

OCEAN INITIATIVES 2021

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**PHOTO CREDITS:**  
Surfrider Foundation Europe, Anabam, Michaël Opsomer, Pierre-Ange Rogliano, Surfrider Paris, Brian Yurasits, Noaa\_Crep.

# THE TEAM



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PROJECT MANAGEMENT



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**CYRIELLE DUFAU**  
COMMUNICATION



**REMI TOUJA**  
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# EDITORIAL

**Nowadays, awareness of the problems associated with waste is high. Widespread media coverage, the growing number of organisations working to tackle the issue as well as its inclusion in political strategies show that it is no longer possible to ignore the problem.**

The presence of waste in our environment in all its forms (macro-waste, micro-waste, nanoparticles) is a reality. It has an impact on us and our surroundings. On this there is an undisputed consensus both from a scientific and a social perspective. Disregarding and minimising the problems generated by waste amount to a failure to understand the dynamics of the world in which we live. A lack of understanding which causes much more harm than the benefits generated by indecision or ignoring the issue.

When we talk about waste in the environment, we are dealing with a long timeframe far beyond the human lifespan. This means that curative or short-term measures have a limited impact on the scale of the problem. As is the case for climate change, it is essential to remember that it will take decades for the results of the actions and measures we take today to be visible. A fact which is difficult to accept.

Taking action has never been more necessary. For more than 27 years, the reality on the ground has been reported back by engaged citizens through Ocean Initiatives. For 27 years, data has been collected to improve scientific knowledge on the subject and support lobbying activities to get things changed at the source. Waste quantification through different protocols brought together in this report to open the eyes of those who live far from the ocean.

**Year after year, the number of people taking part in Ocean Initiatives is increasing. These are committed members of the public who want to see things change. A big thank you to them for their motivation, their commitment and their actions. They are the driving force behind our fight and our convictions. This document is a report on their reality and on that of our environment.**

# OCEAN INITIATIVES 2021

## IN FIGURES







# 01 GENERAL REPORT

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# THREE TYPES OF REPORT FORMS IN 2021



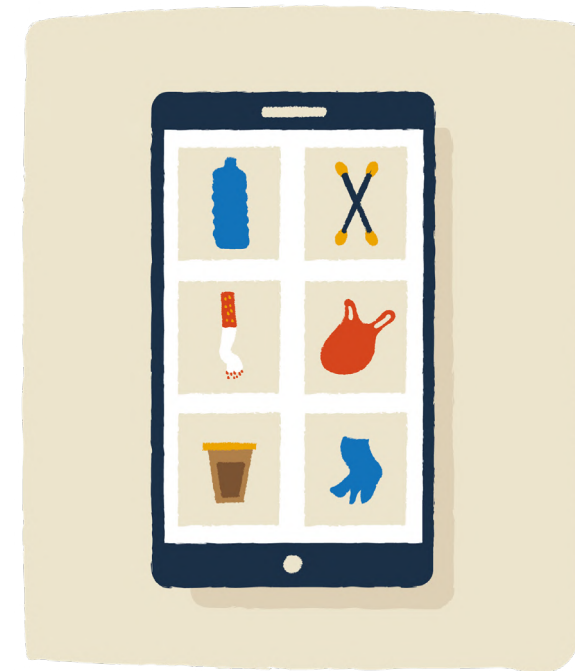
## Simplified report form

The organiser fills in the information about the operation itself and also about the number of cigarette butts counted during their cleanup.



## Intermediary report form

The organiser sends us general information about the operation and the quantification of 35 types of waste broken down by material and usage. The data enable us to monitor for example the application of directives such as the one banning single-use plastics.

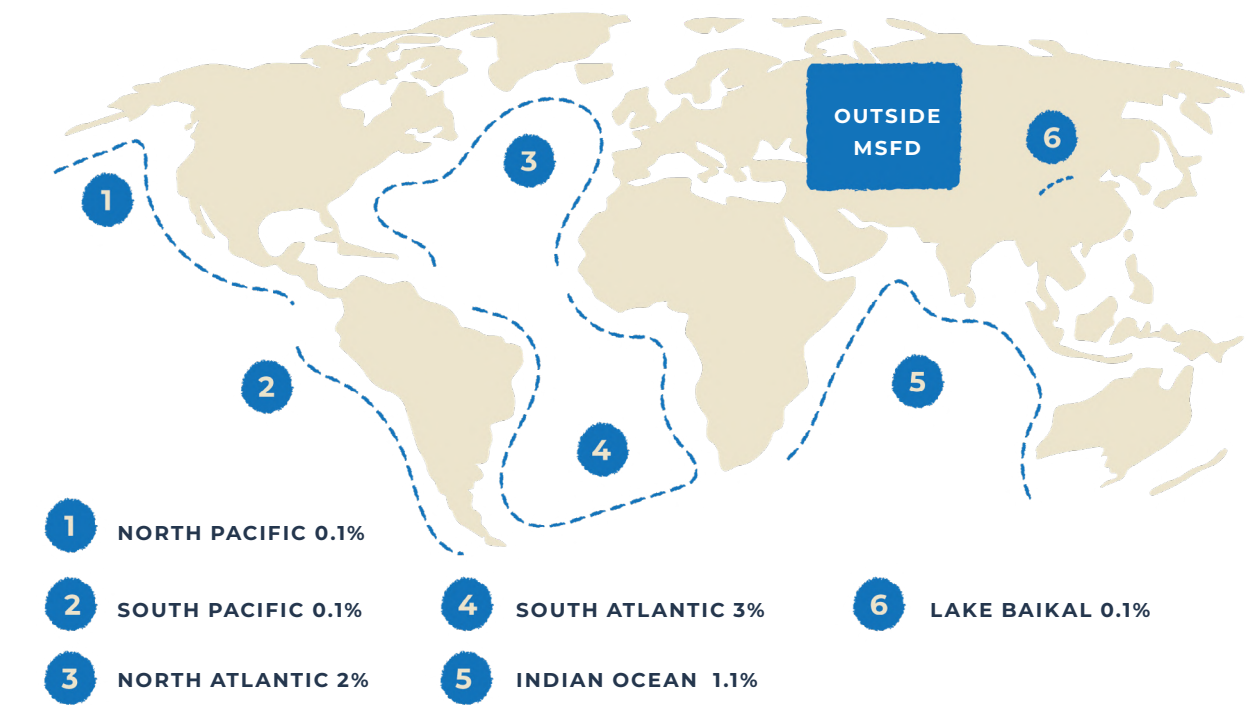
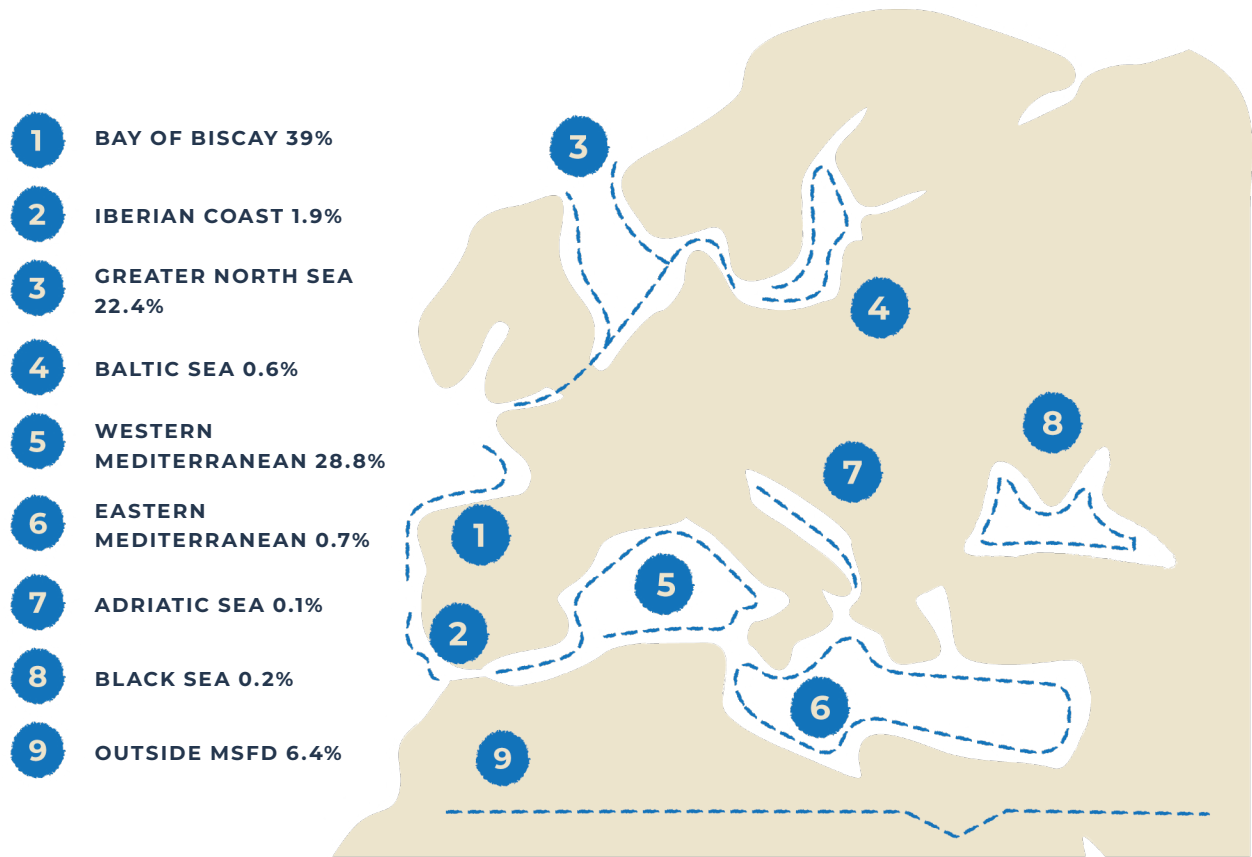


## The Marine Litter Watch app

Surfrider Foundation Europe has teamed up with the European Environment Agency to share data from Ocean Initiatives cleanups and enter them into a European database. More experienced organisers or those wanting to invest more time in the gathering and reporting of information thereby have the opportunity to take part in a comprehensive quantification operation, in line with the standard European protocol, thanks to the Marine Litter Watch application.

# WHERE DID LITTER COLLECTIONS TAKE PLACE?

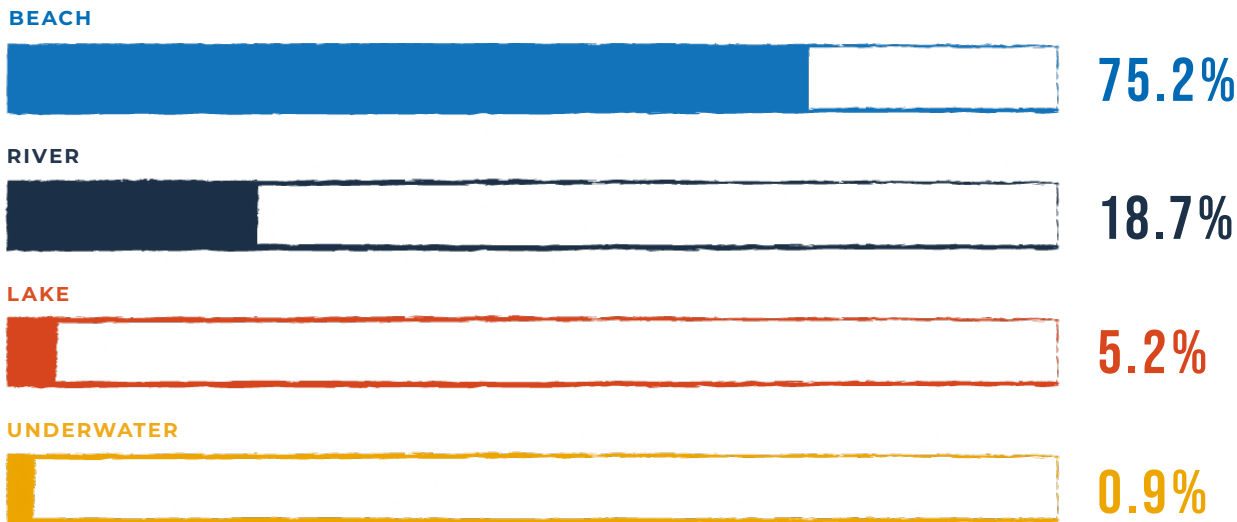
To present the regions where cleanups took place, we have divided the area into two: the major maritime areas in Europe as defined by the Marine Strategy Framework Directive (MSFD), and the regions outside the MSFD.



KEY FIGURES

The figures marked with an asterisk are based on a total of **622 report forms (161 simplified and 461 intermediary).**

Types of cleanups



TOTAL LITTER COLLECTED

For several years we have been asking Ocean Initiatives participants to take part in a community science operation by filling in an intermediary report form to help us improve knowledge of the state of European and world coastlines with regard to marine litter pollution. To do this, we asked them to answer questions about the location of their collection and to quantify **35 types of litter categorised by material and use.**

This list of litter types is based on the master list of the European harmonised protocol and on the types of litter most commonly found on European beaches. **622 organisers accompanied by 19 827 people took part in this exercise. A total of 1 054 852 litter items were collected during these cleanups representing a total volume of 313 641 m<sup>3</sup>.**

TOP 10 LITTER ITEMS





# DISTRIBUTION OF LITTER COLLECTED BY USE

We grouped together the different types of litter by broad category of use. The eight categories are:

**SMOKING-RELATED:** smoking-related litter (e.g. cigarette packets, cigarette butts).

**FOOD PACKAGING:** food packaging and containers (e.g. food wrappers, cups, cutlery).

**NON-IDENTIFIABLE LITTER:** pieces of plastic, polystyrene.

**FISHING:** litter from professional and amateur fishing (e.g. ropes, fishing lines).

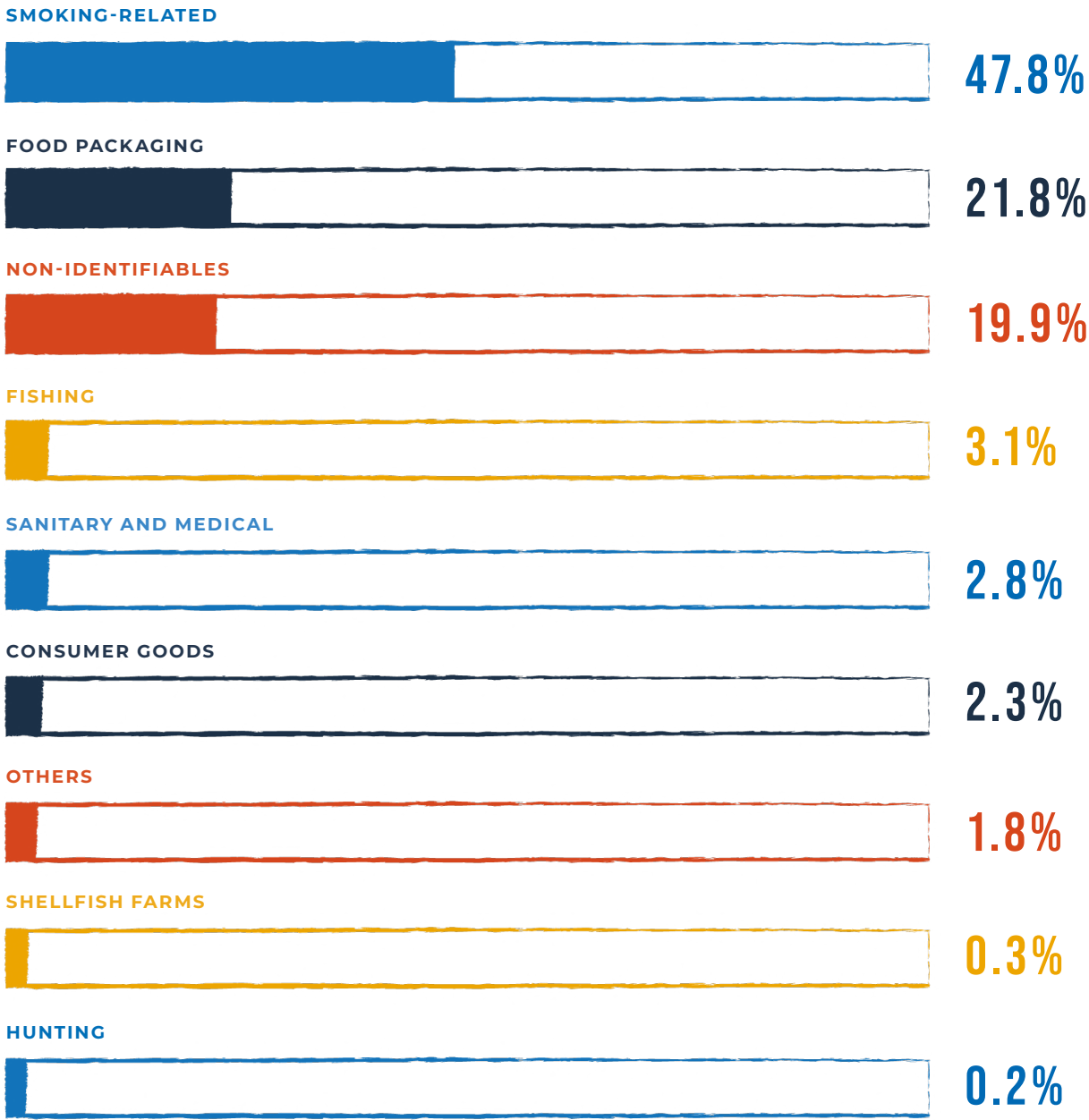
**SANITARY AND MEDICAL:** e.g. medicine packaging, tampons and applicators).

**CONSUMER GOODS:** litter from everyday consumer goods (e.g. plastic bags, toys, shoes, clothes).

**OTHER LITTER:** identifiable litter but which doesn't fit into the other categories, e.g. car parts, biomedica.

**SHELLFISH FARMS:** litter from shellfish farms.

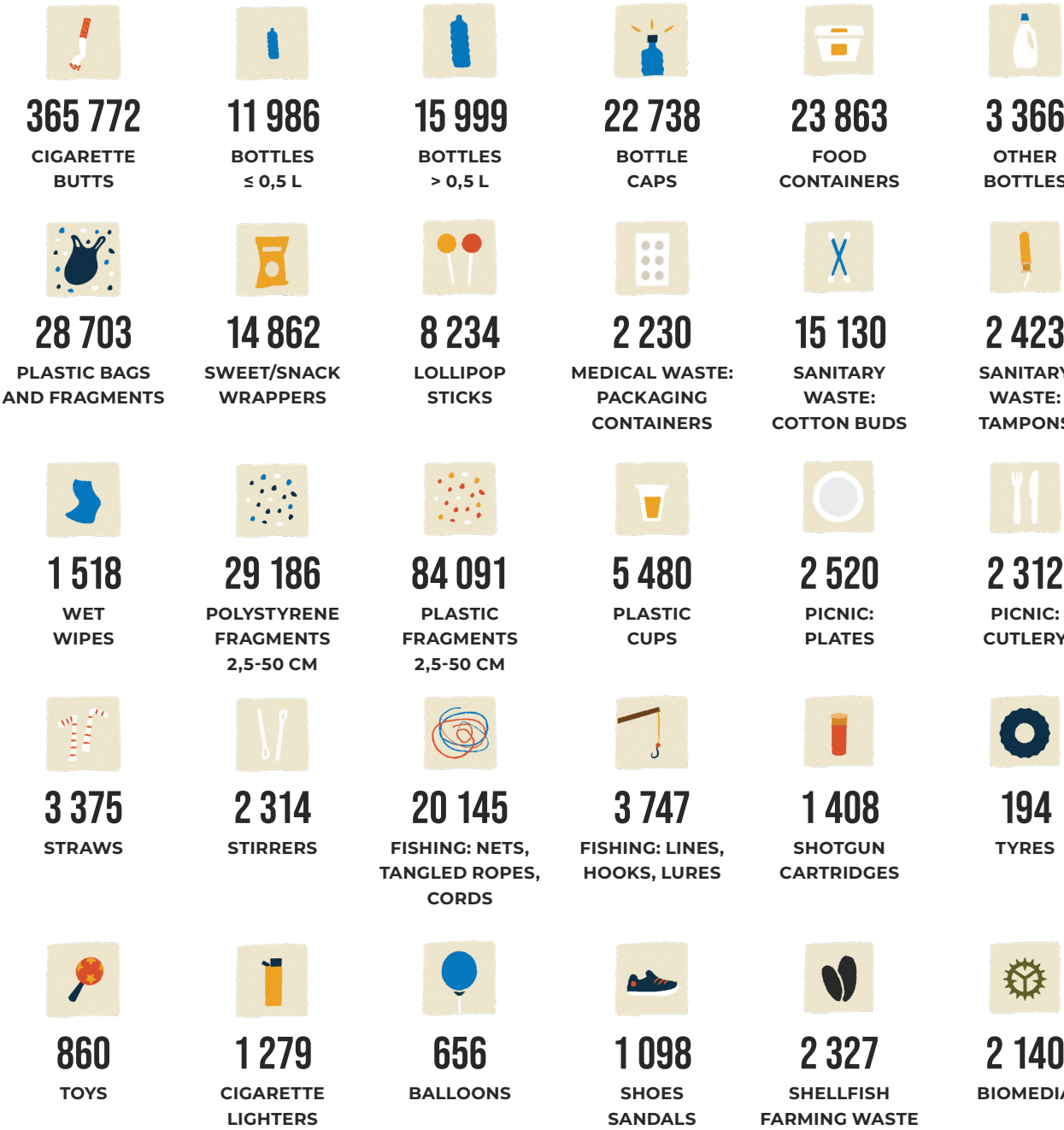
**HUNTING:** litter from hunting activities (shotgun cartridges).



# TOTAL LITTER ITEMS COLLECTED

Total number of items collected in 461 operations: 770 420 quantified items.

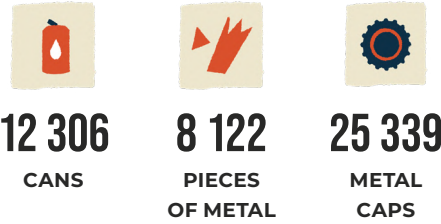
## Plastic



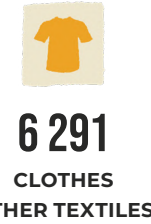
## Glass



## Metal



## Textile







# FOCUS ON THE MARINE ENVIRONMENT: BEACHES

## TOP 10 LITTER ITEMS



## TOTAL ITEMS COLLECTED IN THE MARINE ENVIRONMENT

Total number of items collected from 324 operations: 542 212 quantified items.

### Plastic



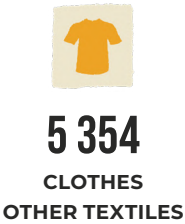
### Glass



### Metal



### Textile





# FOCUS ON WATERWAYS: RIVERS AND LAKES

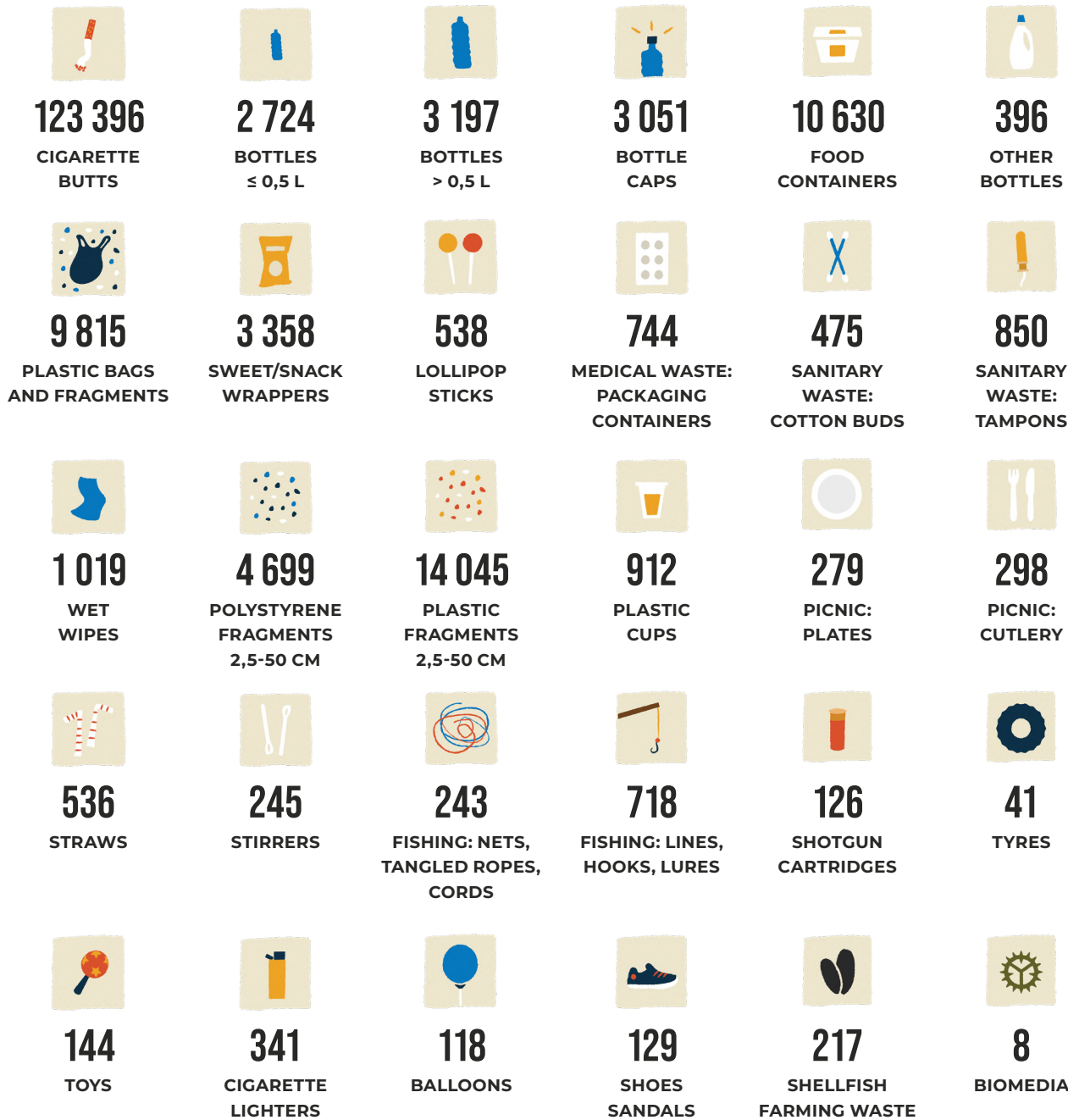
## TOP 10 LITTER ITEMS



## TOTAL ITEMS COLLECTED IN WATERWAYS

Total number of items collected in 137 operations: 228 116 quantified items.

### Plastic



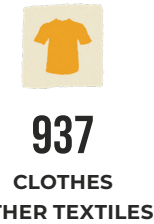
### Glass



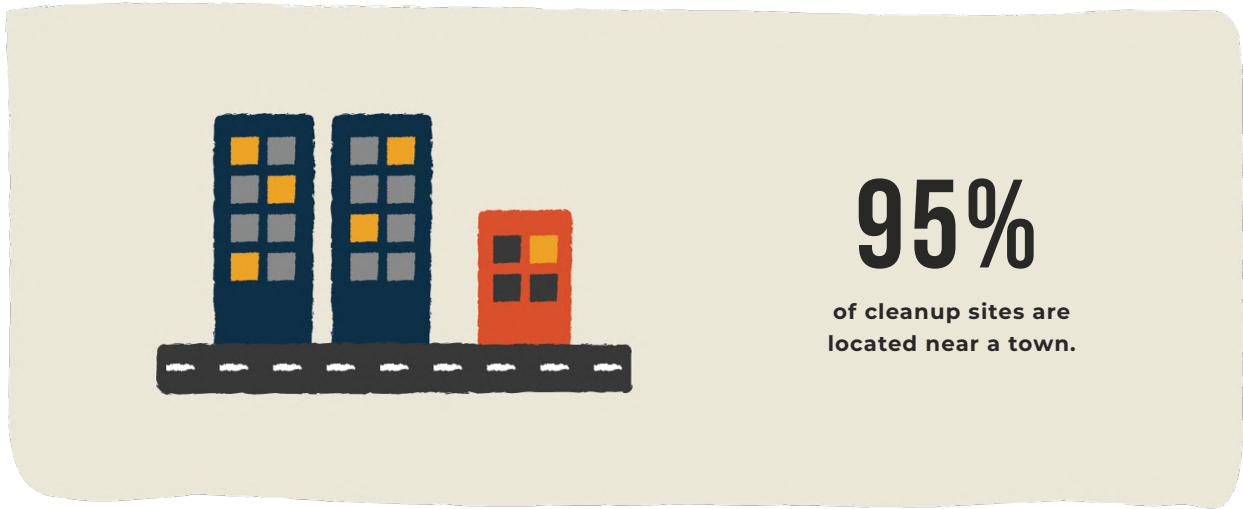
### Metal



### Textile

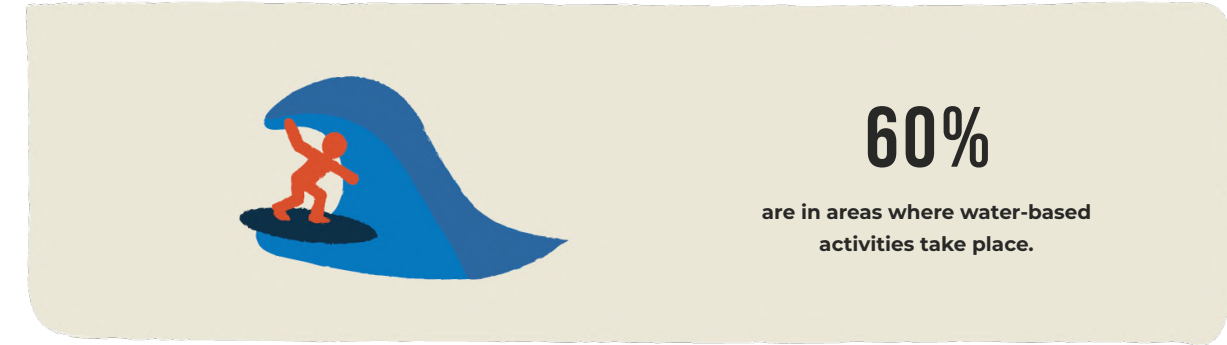
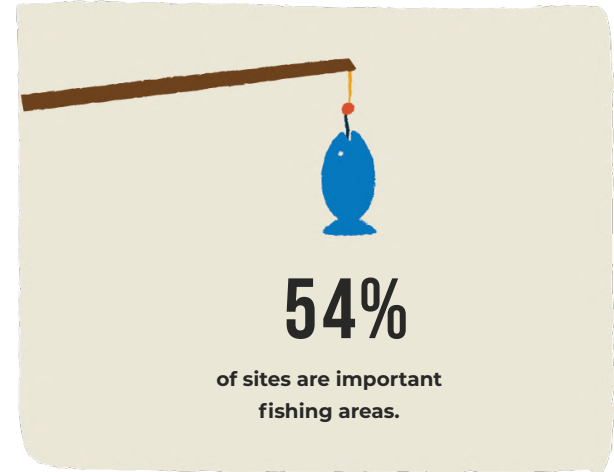


# CLEANUP SITES



# INFORMATION ABOUT THE CLEANUP SITES

Types of activities taking place on the cleanup sites.  
Several types of activities can take place in the same area.  
The percentages are given for reference only.



# PERCEPTION OF THE ORIGIN OF THE LITTER

We asked participants to tell us where they thought the litter found during their cleanups came from.  
Here are their answers:





# OTHER LITTER ITEMS COLLECTED IN LARGE NUMBERS

68% of organisers reported finding large quantities of other litter items during their cleanups (items not included in the list).

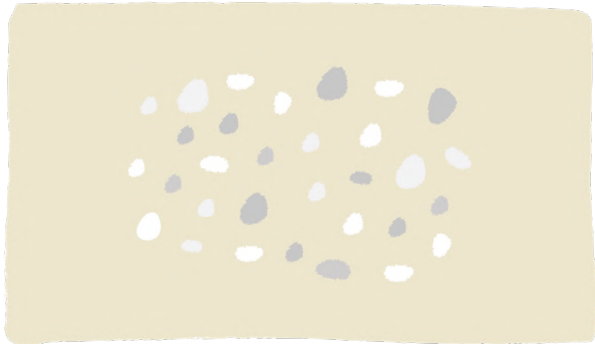


## Surgical masks

The worldwide COVID-19 pandemic has resulted in the use of surgical masks. Many masks are intentionally or accidentally discarded on the ground. This year, across 461 cleanups, 3 033 masks were picked up.

## Industrial plastic beads

Many organisers mentioned the widespread presence of small 1 mm beads. These are the raw material used in the plastics industry to manufacture products. More than 5 000 were counted during a cleanup on a beach in Gironde.



## Building and construction waste

Many instances of the illegal dumping of construction waste were reported, both on beaches and riverbanks. This waste consists of rubble, bricks, insulation materials or pieces of metal. It is usually found in very large volumes.

## Cigarette packets

Cigarette butts are the most common waste item. However, they are often found with cigarette packets. They are a real environmental blight. 123 packets were found during a cleanup in Paris.




# MEDITERRANEAN COASTS: MORE AND MORE CIGARETTE BUTTS



## 106 508 cigarette butts

Several organisers commented on the large quantity of litter on the Mediterranean coast. Much of this litter is due to people's unsociable behaviour. In 2021, 25 Ocean Initiatives were organised in the town of Toulon. Every cleanup recorded cigarette butts. With a total of 106 508 cigarette butts, this means an average of more than 4 260 cigarette butts per cleanup.

## ALSO...



1 425

plastic fragments smaller than 2.5 cm were counted along 150 m of beach in Lacanau.



853

food containers/snack wrappers were identified in Alicante in a single cleanup.





# FOCUS ON UNUSUAL ITEMS

## BEACHES AND RIVERS: OUR WASTE REPOSITORY

More than 540 large or unusual items were found by participants during the 2021 Ocean Initiatives. Here are a few examples:



1 INFLATABLE  
SWIMMING POOL



97 SPRAY-PAINT  
CANS



1 SAFE



12 GLASSES



7 TARPAULINS



1 MINITEL



26 TOOTHBRUSHES



2 STAIRCASES

## HOUSEHOLD ITEMS



16 CHAIRS



4 MATRESSES



1 VACUUM  
CLEANER



3 TELEVISIONS



1 AIR  
CONDITIONING UNIT



1 OVEN

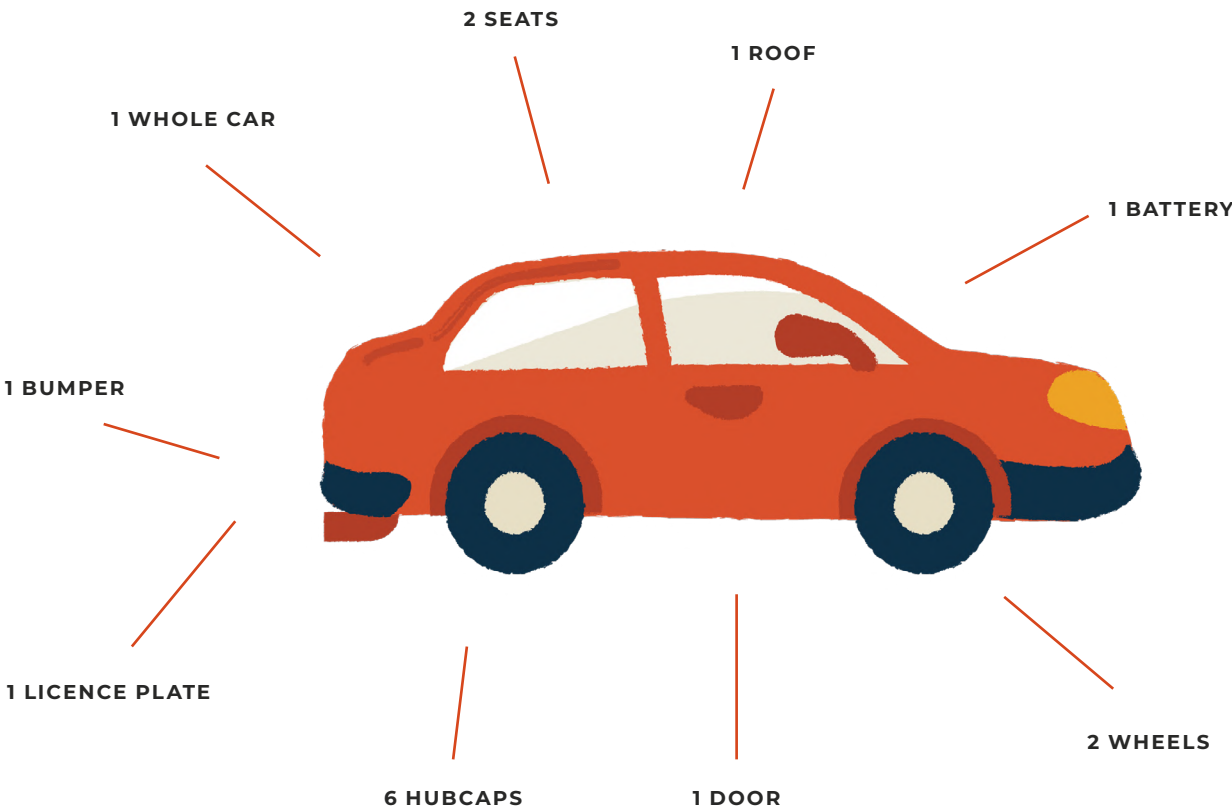


7 REFRIGERATORS



4 RUGS

## CAR ITEMS



## NOT FORGETTING THE USUAL SUSPECTS



285 TISSUES



3 GAS BOTTLES



29 CONDOMS



64 BATTERIES



3 BIKES

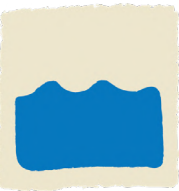


80 TILL RECEIPTS



# 02 RESULTS BY SEA AREA





# BAY OF BISCAY

FROM AUDIERNE BAY (FRANCE) TO CAPE ORTEGAL (SPAIN)

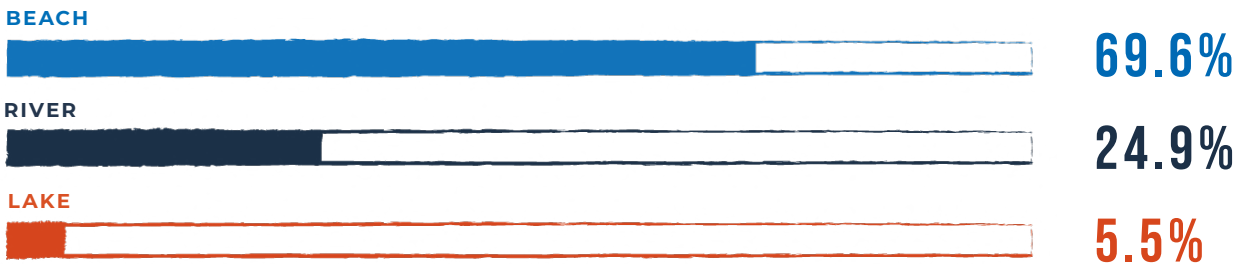
## GENERAL DATA FOR THE WHOLE SEA AREA

Extrapolation based on a total of 763 operations which took place in this sea area.



## RESULTS FROM THE LITTER QUANTIFICATION

### Types of cleanups



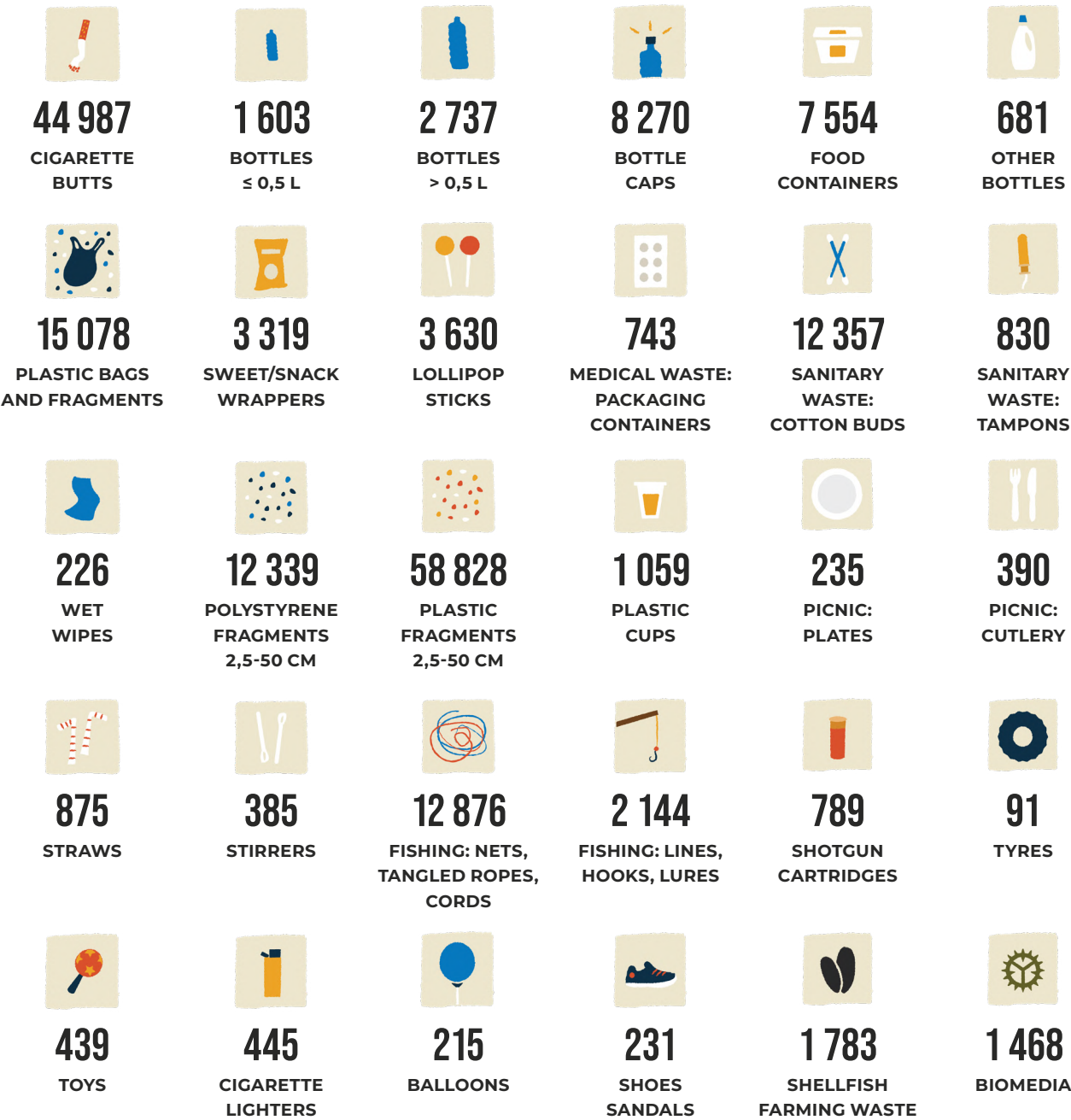
### Top 5 of litter items collected



## TOTAL LITTER ITEMS FOUND

181 quantification operations bringing together 5 619 people took place in Spain (25 cleanups) and in France (156 cleanups).  
218 359 items were collected and quantified over a distance of 152.25 km. The total volume of litter collected was 82.131 m<sup>3</sup>.

### Plastic



### Glass



### Metal



### Textile





FACTS AND FIGURES



1/3

of litter items collected along this area are non-identifiable fragments.



25%

of quantified litter items come from food and drinks (wrappers, bottles).



345

sweet and snack wrappers were quantified along a 750 m stretch during a cleanup in Getxo in Spain.



651

cotton buds were found during an Ocean Initiatives event in Lacanau in France covering 500 m.



89%

of litter items picked up during Ocean Initiatives along the Bay of Biscay are plastic.

AND...



81

biomedia in Seignosse in the Landes in a single cleanup.



15 000

mermaid tears were counted during an Ocean Initiative event in Carcan in Gironde.





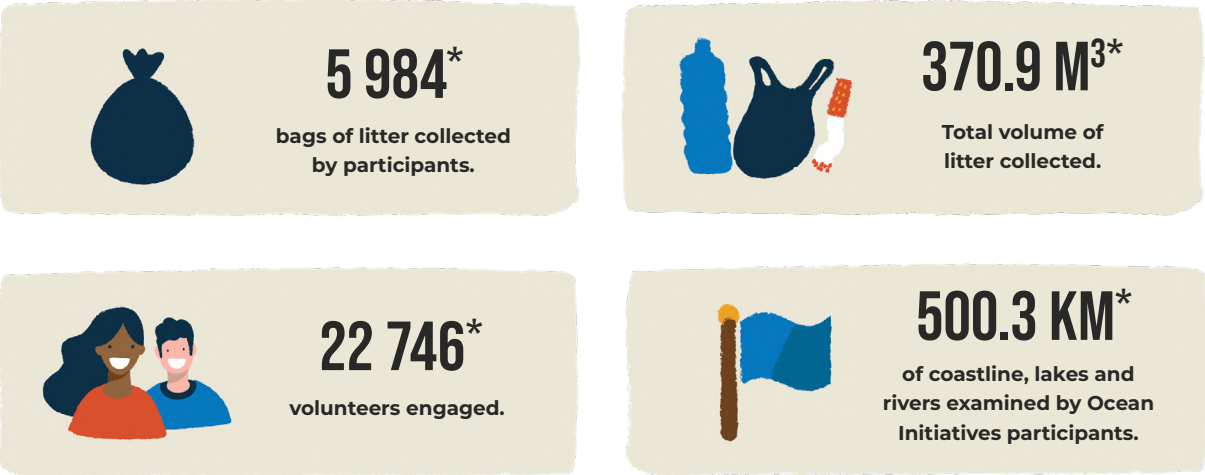


# WESTERN MEDITERRANEAN

FRANCE, SPAIN, ITALY, MOROCCO, TUNISIA, ALGERIA

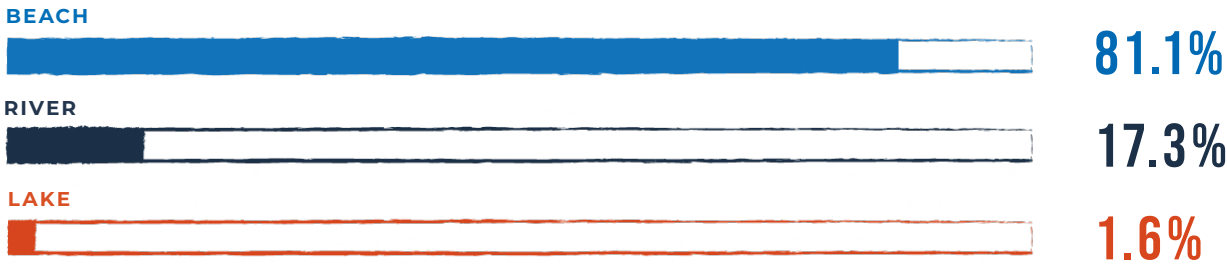
## GENERAL DATA ON THE WHOLE SEA AREA

Extrapolation based on a total of 563 operations which took place in this sea area.



## RESULTS FROM THE LITTER QUANTIFICATION

### Types of cleanups



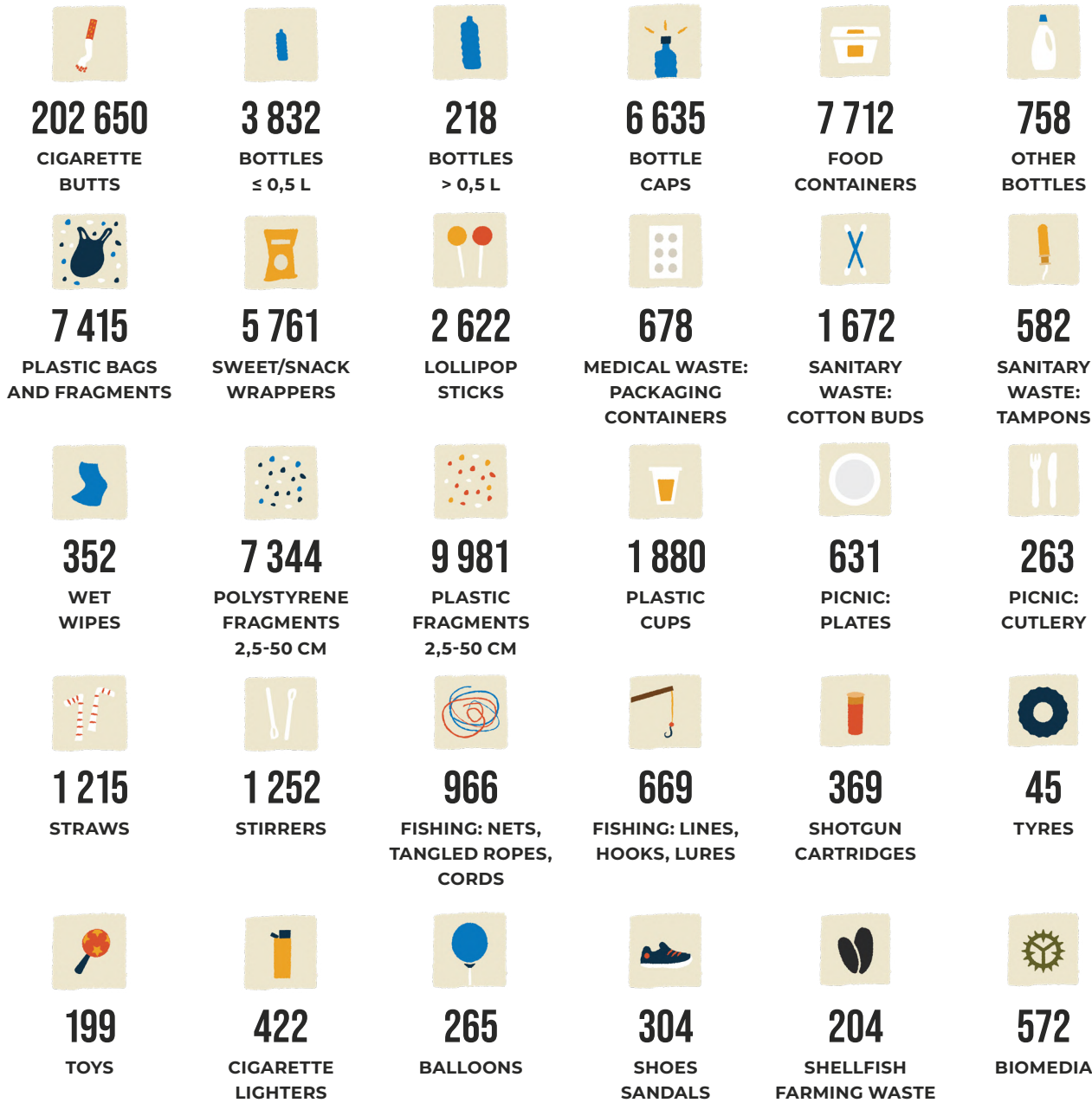
### Top 5 of litter items collected



## TOTAL LITTER ITEMS FOUND

127 quantification operations involving 5 131 people took place in Spain (19), France (104), Italy (2) and Algeria (2).  
306 517 items were collected and quantified over a distance of 112.87 kilometres. The total volume of waste collected was 83.675 m<sup>3</sup>.

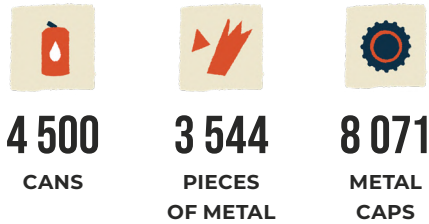
### Plastic



### Glass



### Metal



### Textile



FACTS AND FIGURES

66%

of litter items collected during the Ocean Initiatives in the Mediterranean area are smoking-related.



13 200

cigarette butts were collected in the Var in France in one single cleanup.



1/10

1 out of every 10 litter items was non-identifiable. These are fragments of larger objects.



88.2%

of litter items are made from plastic.

ALSO...



352

sweet wrappers were collected in Barcelona along a 500 m stretch.



610

metal caps were picked up in Lyon on the banks of the Rhône during one Ocean Initiative cleanup.



TESTIMONIAL

MARC RAMBLA

GIRONA - SPAIN

I decided to organise an Ocean Initiative cleanup mainly because I believe it's important that beaches are litter free, because it's a way to raise awareness among those who take part and those who know about the activity, and because I believe the sea gives us everything and so we owe it something in return.

During this cleanup, we found around 150 glass containers of different sizes which probably contained medicines for animals or humans. We also found a high number of cotton buds, shotgun cartridges and a lot of plastic, especially polystyrene. I hope to organise another beach cleanup soon!







# TESTIMONIAL

## MAGALIE JAMBON

BELLEVILLE-EN-BEAUJOLAIS - FRANCE

For our cleanup along the banks of the Ardières, we teamed up with a secondary school in the area: the «Ocean Initiatives» project helped to establish ties between our two schools which are both located on the Ardières drainage basin, and we hope this relationship lasts.

We realised that the young students were already very aware of eco-citizen actions to protect the environment, and very conscious of the impact of their actions not only on the immediate environment, but further afield too.

We have been organising cleanups for several years in the same area and we are really pleased to observe, that year on year, the volume of litter collected has been decreasing significantly: there are still the usual litter items such as drink cans, bottles, wrappers, but fewer and fewer large items as a result of «fly tipping».

Doing these projects with school children is very rewarding and is always an important part of their education. They are always very enthusiastic and keen to get involved!



# TESTIMONIAL

## ESTELLE CAFORA

TOULON - FRANCE

Our branch has organised around ten cleanups, all on beaches.

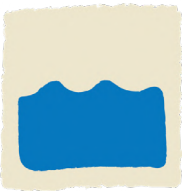
Our branch is quite new and we wanted to find activities which would raise public awareness. The Ocean Initiatives were exactly what we were looking for! I became a volunteer at Surfrider Foundation Europe 2 years ago, when I moved closer to the sea and for me, organising an OI is a way of acting to protect it. When I lead an OI, I also give talks and encourage discussions (based on the GSEs) so that participants know they are not simply picking up litter.

It's important they stay behind after, keep their gloves on, count the litter and continue the discussions, connect with others. A lot of people have since got very involved and want to become volunteers themselves! Over the year, we've found fewer and fewer surgical masks. However, on the Mediterranean beaches there have been a lot of biomedical waste from treatment plants over the last 4-5 months.

It's great to see children really getting into it and bringing their parents along too!





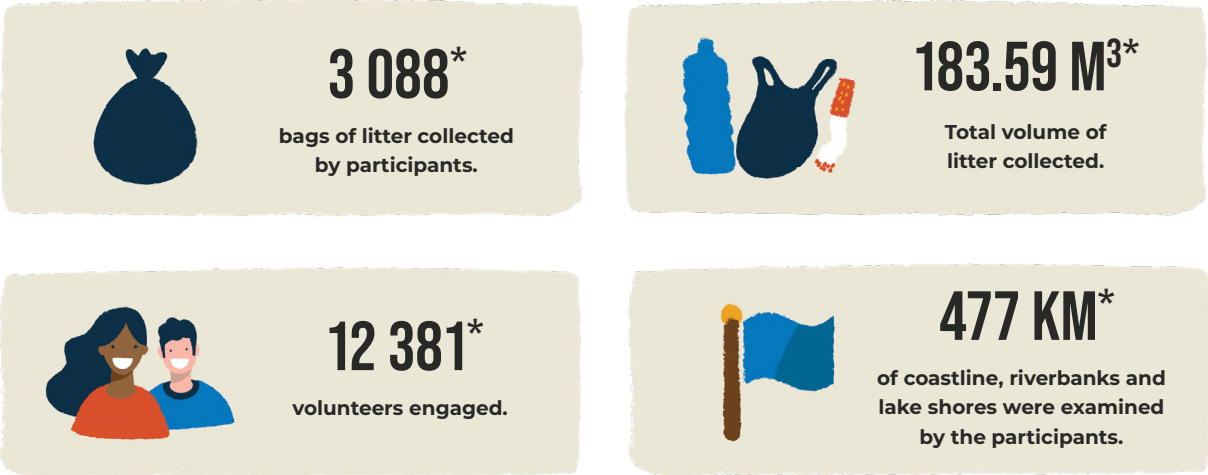


# GREATER NORTH SEA

UNITED KINGDOM, NORTHERN FRANCE, BELGIUM, NETHERLANDS, DENMARK, WESTERN GERMANY, NORWAY, SWEDEN.

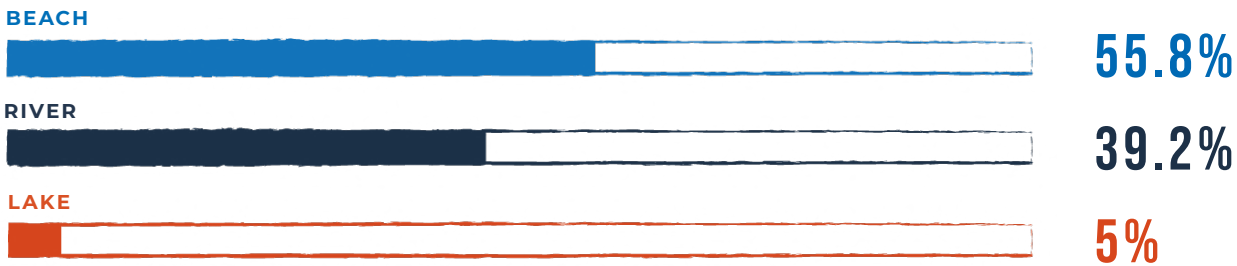
## GENERAL DATA FOR THE WHOLE SEA AREA

Extrapolation based on a total of 437 operations which were carried out in this sea area.



## RESULTS FROM THE QUANTIFICATION OF THE LITTER

### Types of cleanups



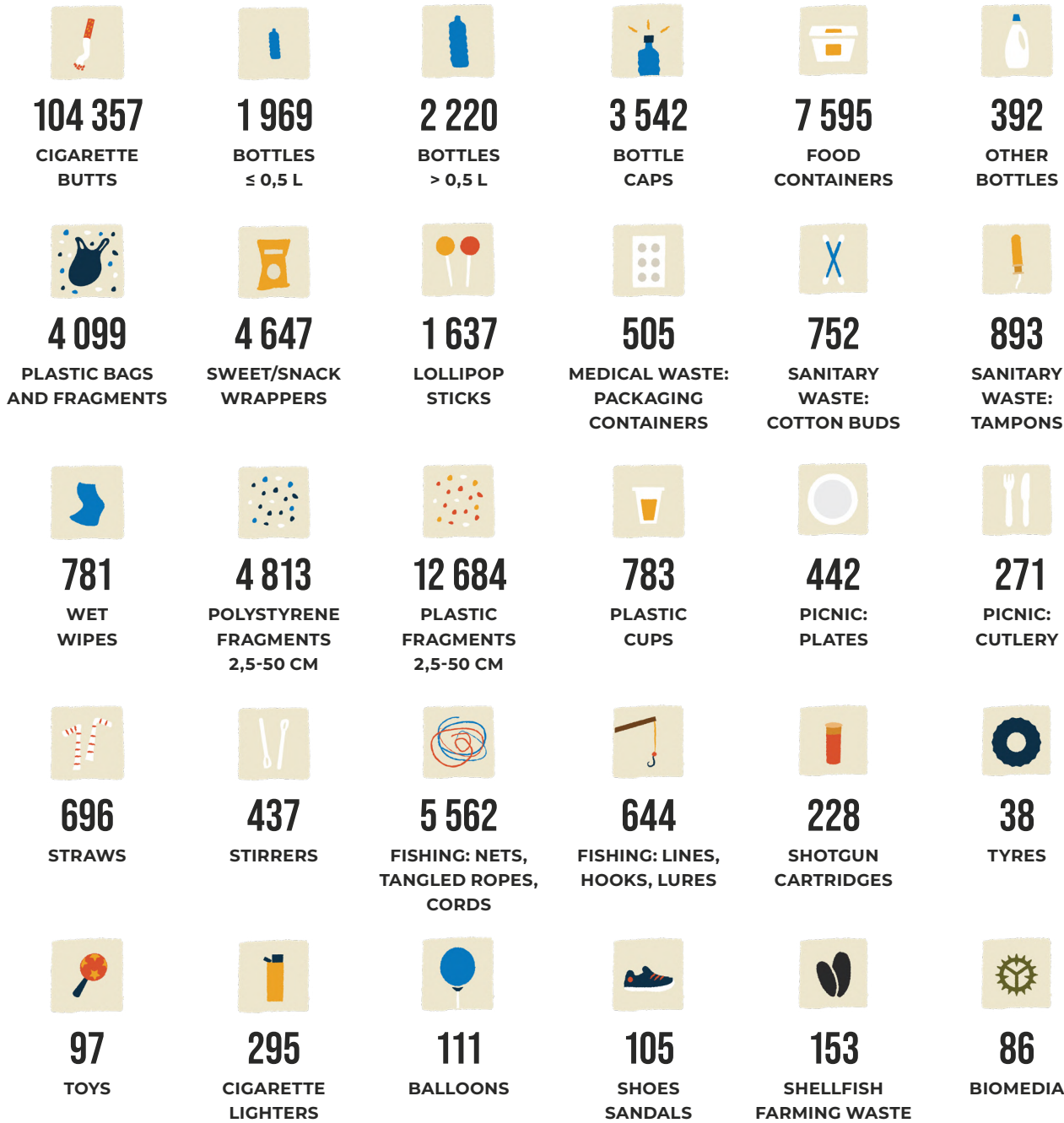
### Top 5 litter items



## TOTAL LITTER ITEMS FOUND

120 quantification operations involving 3 103 people took place in France (110), Germany (8) and the Netherlands (2). 189 943 items were collected and counted over a distance of 131 190 metres. The total volume of waste collected was 49.7 m<sup>3</sup>.

### Plastic



### Glass



### Metal

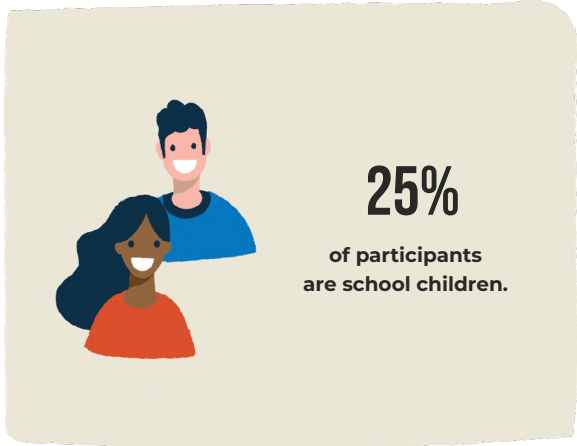


### Textile

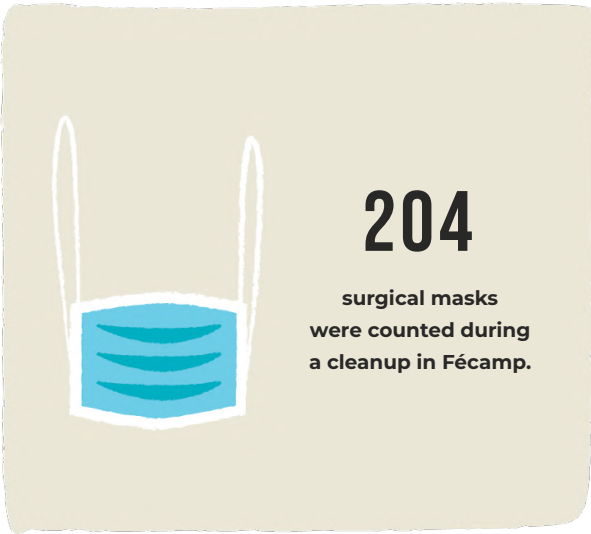
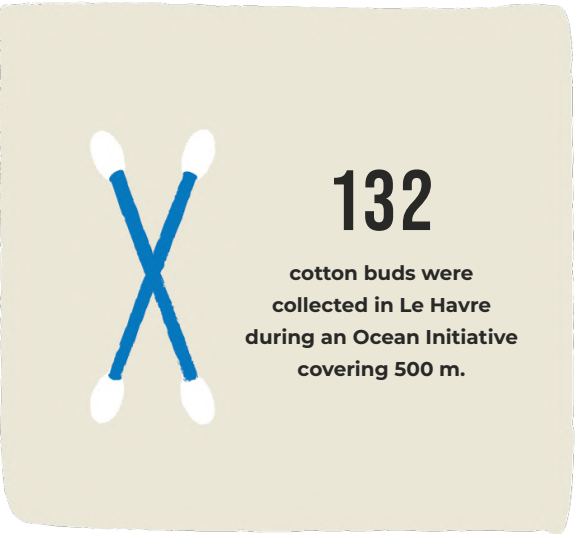




FACTS AND FIGURES



AND...





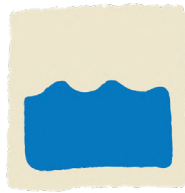


# OTHER SEA AREAS

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In this report, we present the results from community science projects for each sea area. To do this we need a minimum number of completed report forms to ensure the data is representative of the pollution in each sea area. Organisers were involved in counts across Europe but we don't always have enough data to present them separately. That's why we've decided to let them speak for themselves so they can share their work and experience of pollution.





# EASTERN MEDITERRANEAN

## SAMUEL GUELEM

ISRAEL

**We love the sea and want to protect it, that's why the volunteers from my Clean Beach group clean the beaches of Bat Yam all year round.**

We have also organised cleanups as part of the Ocean Initiatives campaign because sorting and quantifying the waste is an educational activity for our partners (schools, surf schools, scouts, divers, youth groups, etc.) and the opportunity for us to get involved in a community science project and environmental lobbying.



We collect all types of litter on the beaches, but plastic pollution is the most common (cigarette butts being the number 1 item). The difficulty lies in making this activity fun in order to mobilise enough volunteers each time.







# 03 BIOMEDIA

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# FROM WASTEWATER TREATMENT PLANTS TO OCEAN POLLUTION

Biomedia are small round plastic objects with a honeycomb structure. They are designed to hold the bacteria used in the biological filtration of wastewater in treatment plants (collective and industrial) as well as in the fishing industry. Biomedia encourage the development of the bacteria which break down the organic matter.

During extreme weather events generating significant water flows (snowfall, storms, heavy rainfall), or in peak tourist periods, the capacity of water treatment plants can become saturated leading to direct discharges into the environment. Biomedia can then be found in rivers and on the coast. The poor condition of some fish farms as well as extreme weather events can also result in the loss of biomedia within these facilities. Since 2008 Surfrider Foundation Europe's objective has been to establish strict regulations governing the use,

processing and management of bacterial growth media to reduce the environmental pollution resulting from their loss.

« An object designed to clean our water has become an object which is polluting our ocean ».

To act directly at the source, Surfrider Foundation Europe is carrying out various investigations helped by citizens and associations to gain better understanding of the process, identify the sources of pollution and identify the producers. Over the course of the 2021 Ocean Initiatives, 2140 biomedia were found during 105 cleanup operations on beaches, lakes and rivers (all areas and all shapes combined). Biomedia were found in 20% of cleanups.



# NUMBER OF BIOMEDIA FOUND OVER 1000 METRES PER SEA AREA

In total 105 cleanups recorded the presence of biomedia along a distance of 88.7 km. Participants collected on average 24 biomedia every 1000 m.

# TYPES OF BIOMEDIA



SEA AREA / SHAPE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	TOTAL
Bay of Biscay	18	44	96		134	20	72	209	619	122	10	5	17	12	15	1	12		10		3	12	10	2	22	1 465
Greater North sea	1				65	3			3	5															9	86
Western mediterranean			4		14	1	1	1	2	136		23	32	1		2						4	1	2	350	575
Iberian coast		10	2		2	1																				15
TOTAL	19	54	102	0	215	25	73	210	624	263	10	28	49	13	15	3	12	0	10	0	3	16	11	4	381	2 140



# WHAT HAPPENED IN 2021?

During 2021, numerous reports from volunteers in the field indicated the presence of biomedias on beaches and waterways across Europe. Thanks to this feedback, we were able to compile valuable information highlighting new sources of pollution. In order to prevent future pollution but also to treat existing pollution at its source, we share our data with professionals in the sector.

In 2021, we were able to identify 3 major discharges of biomedias in the environment. The first, at the beginning of the year, in the Mediterranean where thousands of K5-type biomedias (shape 25 on the form) were visible on the beaches of Corsica close to Bastia. This was due to a malfunction within one of the town's treatment plants.



In the middle of the year, on the banks of the Marne in France, numerous reports indicated the presence of K5-type biomedias (shape 25). Finally, in December, following a number of storms in the Basque Country (France and Spain), K3-type biomedias (shape 10 on the form) were found at the mouth of the Bidassoa and on the beaches of Hendaye. Thanks to the invaluable help of local citizens, the origin of the pollution was identified and the pollution stopped.



# A REPORT AND AN ADDRESS TO RECORD YOUR FINDINGS

A report on biomedias bringing together all the knowledge and the different cases of pollution has been created by SFE. This report is published so that we can share our observations with elected leaders and environmental professionals and thereby contribute to the improvement of practices and limit the risks of pollution. As well as with Ocean Initiatives participants who have enabled us to gather valuable information to understand this form of pollution.

However, the battle isn't over and this type of pollution continues. So, if you've witnessed biomedias pollution, don't forget to let us know through the Ocean Initiatives intermediary report form or directly using this form. Every case we resolve brings us one step closer to ending pollution!

## For more information on biomedias:

- <https://surfrider.eu/en/our-missions/scientific-legal-expertise/biomedias-70164.html>
- <https://youtu.be/fHoHjpkivl0>





# 04 FOCUS ON CIGARETTE BUTTS

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# CIGARETTE BUTTS, THE BIGGEST SOURCE OF OCEAN POLLUTION

Since 2020, we have focused in particular on cigarette butts through the report forms provided to Ocean Initiatives organisers. Huge quantities of cigarette butts are found in the ocean and on the ground. Every year, it's estimated than 4 500 billion cigarette butts are thrown into the environment across the world. 40% of them are thought to end up in the ocean. A high number, especially when we know that cigarette butts have a double impact in terms of pollution.

## Plastic pollution

Two-thirds of the weight of a cigarette corresponds to the filter. This is the part of the cigarette made from plastic, specifically cellulose acetate. The filter is very light and once thrown on the ground, it will be swept away by the wind and rain towards sewer drains and waterways, eventually ending up in the ocean. Once in the water, the butts break down bit by bit and generate micro and nano plastics which can no longer be collected.

## Chemical pollution

Cigarette butts contain different chemical substances (up to 4 000). These include heavy metals such as mercury, cadmium and lead as well as pesticides, phenols, nicotine and tar. These substances mean cigarette butts are classed as toxic waste. Indeed, 1 cigarette butt can pollute up to 1000 litres of water, making it unsuitable for consumption, and harm local plants and wildlife and the food chain.



# WHERE CIGARETTE BUTTS WERE FOUND

BEACH



76.2%

RIVER



27.2%

LAKE



4.6%

# FACTS AND FIGURES



793

the average number of cigarette butts counted at each cleanup during the 2021 Ocean Initiatives.

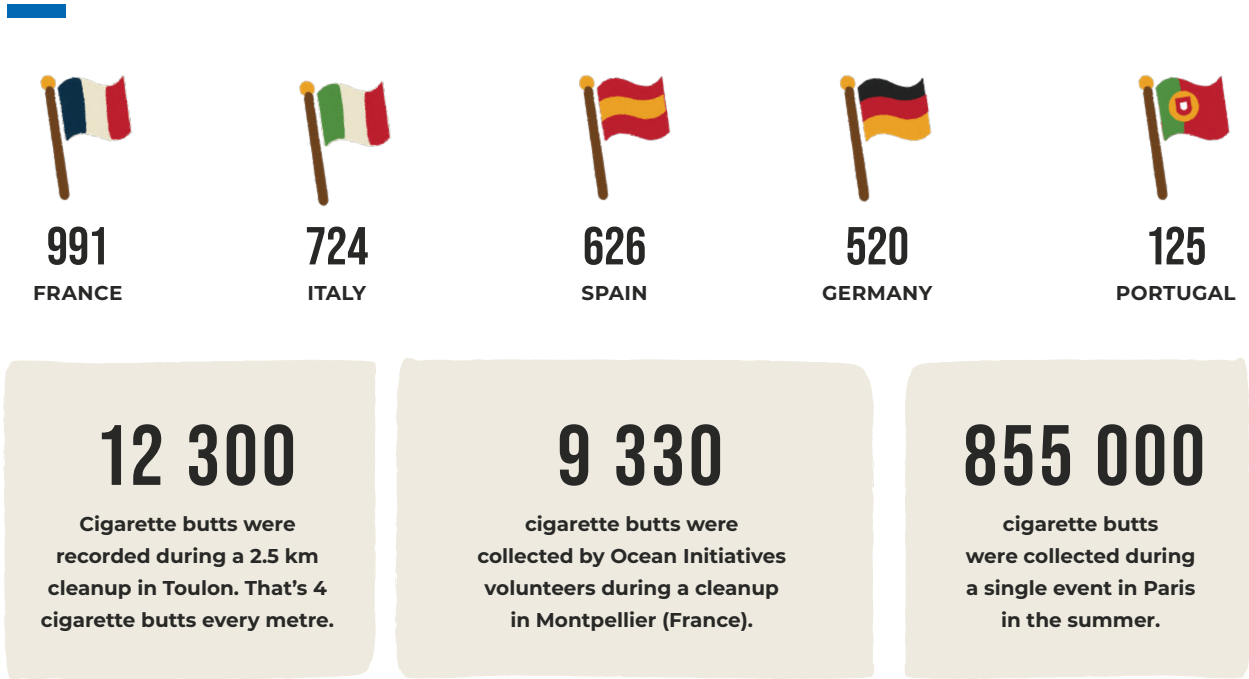


100%

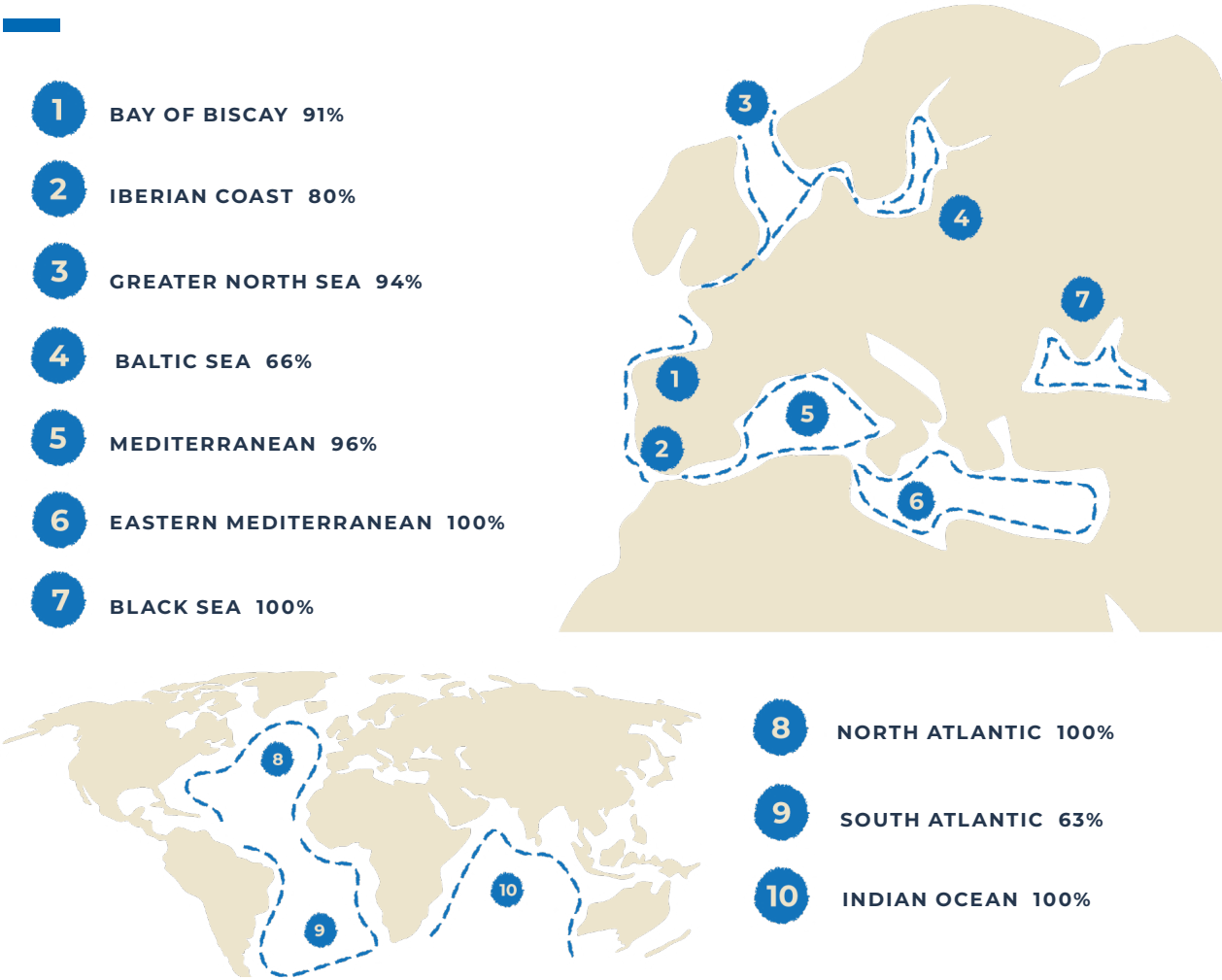
in every country where Ocean Initiatives took place, cigarette butts were found.



# AVERAGE NUMBER OF CIGARETTE BUTTS COLLECTED PER COUNTRY



# PROPORTION OF CLEANUPS WITH CIGARETTE BUTTS BY SEA AREA



## Regulations concerning cigarette butts

Until now, cigarette butts have not been subject to any specific measures despite their undeniable impact on the environment. Across the European Union, they are collected along with regular household waste even though they are classed as toxic waste.

Private collection systems are slowly being put in place to try to re-use cigarette butts, notably in the energy sector.

Over recent years, the principles of «polluter pays» and extended producer responsibility have been increasingly advocated as a means of halting this pollution and making companies responsible for the end-of-life of the products they sell.

Thereby, in 2019, through the European directive on single-use plastics (SUP), it was made mandatory for every member state to put in place for 2023 an extended producer responsibility scheme for the collection and processing of cigarette butts.

In real terms, tobacco manufacturers must pay for: the collection of cigarette butts through a dedicated channel, the transport, cleaning and treatment of cigarette butts littering public spaces as well as campaigns to raise people's awareness. At the beginning of 2021, France became the first European country to introduce such a scheme.

## Surfrider Foundation Europe's recommendations

Surfrider Foundation Europe is fully committed to supporting the implementation of new cigarette butt prevention and management measures within the European Union. Thanks to the feedback from your actions on the ground, we can use the data as a basis for the recommendations we make to policy makers and manufacturers.

We are continuing to act and demand the reinforcement of the extended responsibility of companies and for it to go further, for example by including an eco-contribution to be imposed on tobacco-producing industries to counter the pollution generated. Transparency with regard to the data on the quantity of products sold and collected is also necessary in order to have a clear vision of the extent of the pollution. This must be accompanied by the proper transposition of the 2019 European Directive by member states. However, the measures will not be effective in limiting cigarette butt pollution if there is no incentive to make cigarettes more ecological, for example by radically reducing the quantity of chemical pollutants they contain. This approach requires improved scientific knowledge on the impact of cigarette butts on the environment in order to put forward suitable solutions.

On the local level, the putting in place of smoke-free places and campaigns to raise awareness of the environmental impact of cigarette butts must be escalated so that all citizens are aware of the issues.



# 05 FOCUS ON MERMAID TEARS





# THE MERMAID TEARS, AN UNNOTICED POLLUTION

Mermaid tears, also called pre-production plastic pellets (PPPs), are small plastic cylindrical beads or pellets the size of a lentil. They are the raw materials used by manufacturers to make plastic objects by melting, moulding or extruding them.

Mermaid tears are very light. The wind and rain are two elements which help to disperse the pellets in the environment. Every year, millions are found in rivers and the sea. They have a huge impact on sea life and the coastal environment. The pollution may arise during the handling of the PPPs, their transport or their storage. Their small size means they are not always visible and are regularly mistaken for sediment. Surfrider Foundation Europe is particularly interested in this type of pollution.

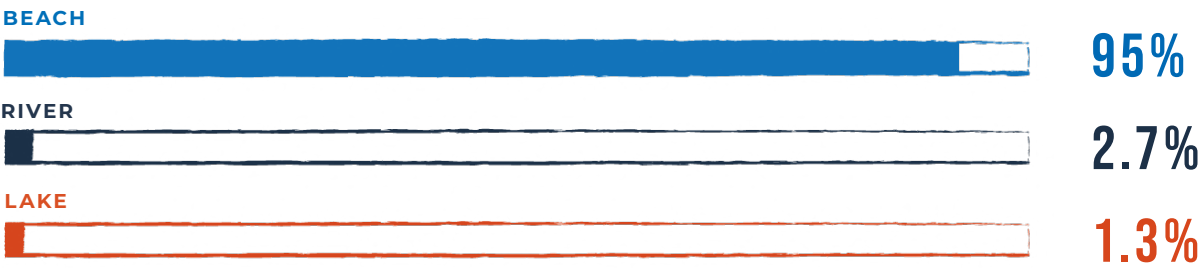
PPPs have therefore been included in Ocean Initiatives operations since 2018 in order to identify the location and quantity present in the environment. Collection organisers and participants are asked to look out for them during the event and to report back to us if any are found.

The observations which are transferred to us are analysed and shared with specialist associations, scientists and public authorities. We want to warn policy makers about this microplastic pollution, which most of the time goes unnoticed and for which there are currently no regulations. We want concrete measures aimed at those producing, transforming and transporting plastic pellets to limit their discharge into aquatic environments.



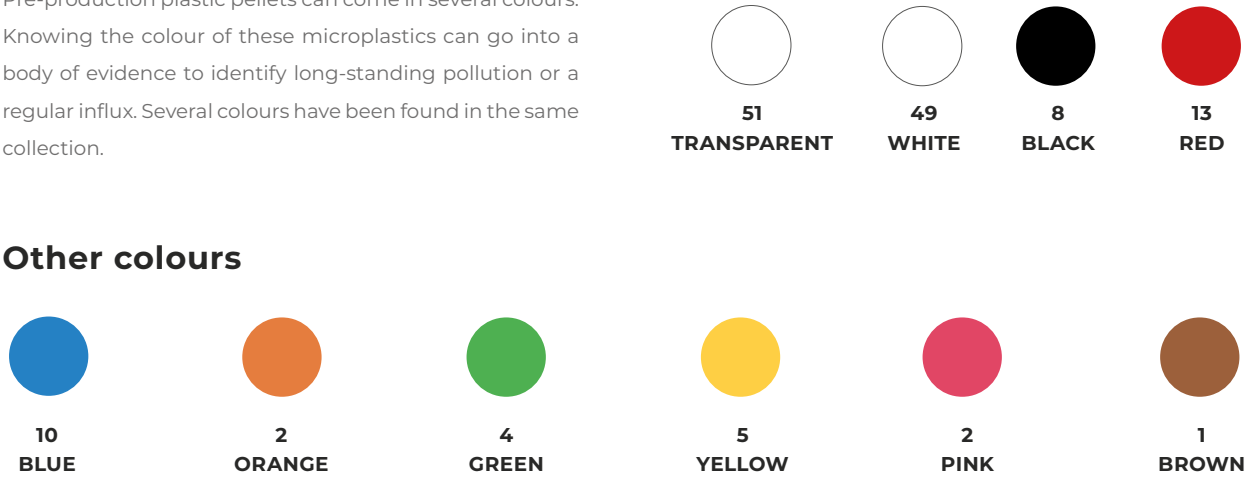
If you would like more information about this issue, here's the Surfrider Foundation Europe 2020 report on the subject: <https://surfrider.eu/wp-content/uploads/2020/11/report-pellet-pollution-2020.pdf>

# PLACES WHERE PRE-PRODUCTION PLASTIC PELLETS (PPPS) HAVE BEEN FOUND



# COLOURS FOUND DURING THE COLLECTIONS

Pre-production plastic pellets can come in several colours. Knowing the colour of these microplastics can go into a body of evidence to identify long-standing pollution or a regular influx. Several colours have been found in the same collection.





# OCEAN INITIATIVES

Ocean Initiatives is a programme aimed at reducing marine litter at its source. Through local litter collections around rivers, lakes, beaches and seabeds, Surfrider Foundation Europe aims to bring about a societal change. The data collected during these operations also enable us to produce status reports to push for the adaptation of the European regulatory framework.

[www.oceaninitiatives.org](http://www.oceaninitiatives.org)