OCEAN INITIATIVES 2014
ENVIRONMENTAL REPORT

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#EDITORIAL

2833 m³ is the volume of litter collected in lakes and rivers and on beaches and the seabed during the 19th Ocean Initiatives. This staggering figure shows us that the issue of marine litter invading the ocean is far from resolved. In spite of this disheartening analysis, a formidable ray of hope remains: YOU!

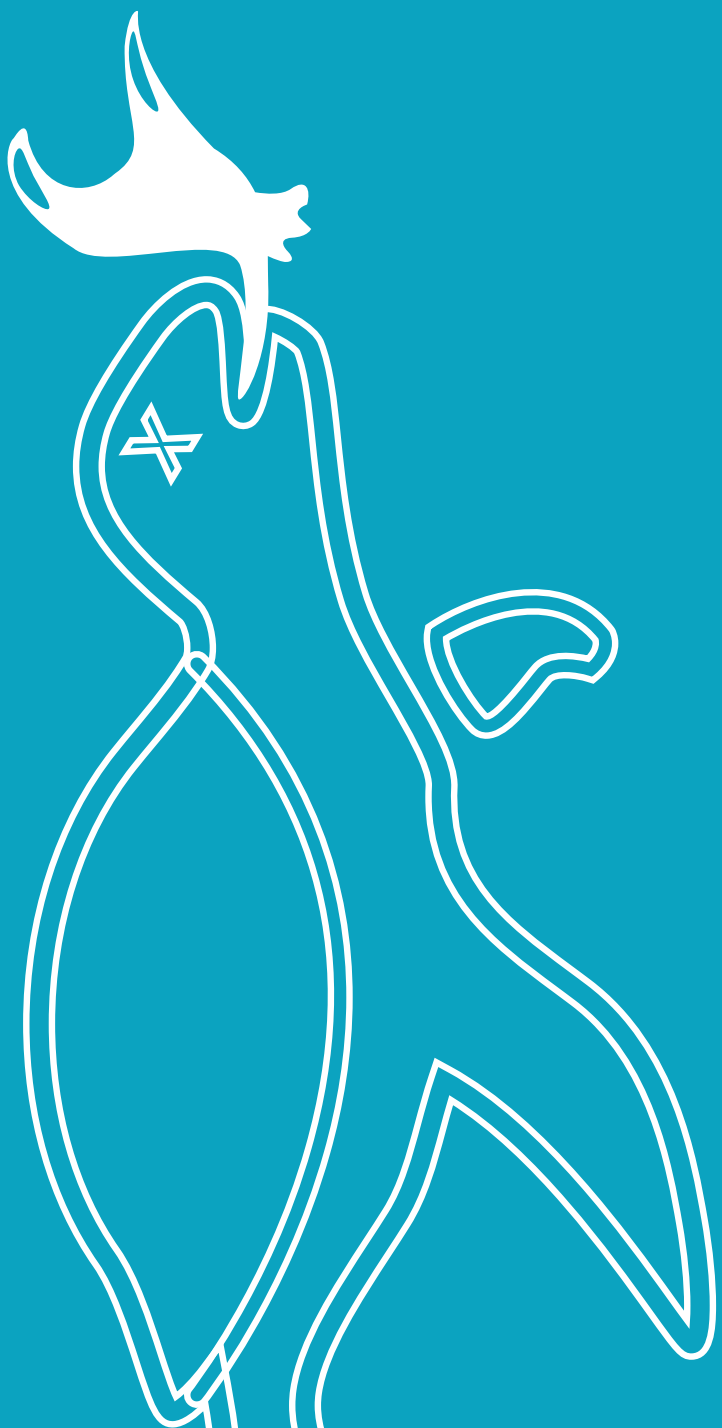
45 366 Is the number of individuals who took action across the world to fight against this scourge and who participated in recovering the places you love and often visit. It also represents the potential for raising the awareness of 1 million citizens, if each Ocean Initiatives participant informs their loved ones. Thanks to this unprecedented action we were able to reach people upstream of the coastal area, inland, which is the source of over 80% of the waste that ends up in our seas and oceans. Over these 19 years working together, the environmental aspect of the operation has not ceased to develop and our knowledge of marine litter has become more and more precise. This deepened understanding of the issue is due, in large part, to the implementation of a data sheet that is completed by participants which enables us to draft an environmental report for the Ocean Initiatives.

This year, **21 632 citizens** were involved in participative science by filling out the data sheet and giving us precious data on the rivers, lakes, beaches and the seabed. The data was analysed and extrapolated in order to document the current state of pollution caused by marine litter in Europe and the world. In the report we have presented the data based on large maritime areas which have their own characteristics. These areas also correspond to the large maritime coastlines targeted by the Marine Strategy Framework Directive, the first European text recognising marine litter as an indicator of the quality of the environment, aiming to achieve a better environmental status in marine waters by 2020.

This report belongs to you, and the Ocean Initiatives team is delighted to share it with you.

Continue to take action every day and don't forget «if you drop it in the land, it ends up on the sea".

The Ocean Initiatives team



#SUMMARY

01. GENERAL REPORT ____ **06**

02. REPORT BY SEA AREAS ____ **12**

ADRIATIC SEA ____ 14
BALTIC SEA ____ 16
BAY OF BISCAY AND IBERIAN COAST ____ 18
BLACK SEA ____ 24
CELTIC SEAS ____ 26
NORTH SEA CHANNEL ____ 28
IONIAN SEA AND CENTRAL MEDITERRANEAN ____ 34
MACARONESIA ____ 36
NORTH ATLANTIC ____ 38
WESTERN MEDITERRANEAN ____ 40
CARIBBEAN AREA ____ 44
INDIAN SEA ____ 46
SOUTH ATLANTIC ____ 48

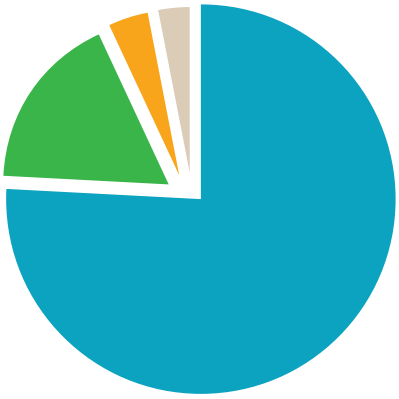
03. BIOCARRIERS ____ **50**

04. FOCUS: RIVERINE INPUT ____ **52**

01
GENERAL REPORT

* Numbers with an asterisk are derived from extrapolations made from **576 reports** filed before October 27th 2014, from more than **1187 collections.**

TYPE OF COLLECTION



- BEACHES - 75,5%
- RIVERS - 16,6%
- LAKES - 3,8%
- SEABED - 2,7%

LITTER COLLECTED

32683*
bags of litter were collected by the participants

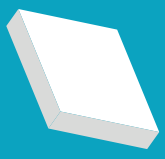
2833m³*
Total volume of litter collected

1. NON-IDENTIFIABLE FRAGMENTS OF PLASTIC WASTE

2. CIGARETTE BUTTS

3. PLASTIC BAGS AND PIECES OF PLASTIC BAGS

4. PIECES OF POLYSTYRENE



5. FOOD PACKAGING (confectionery, trays...)

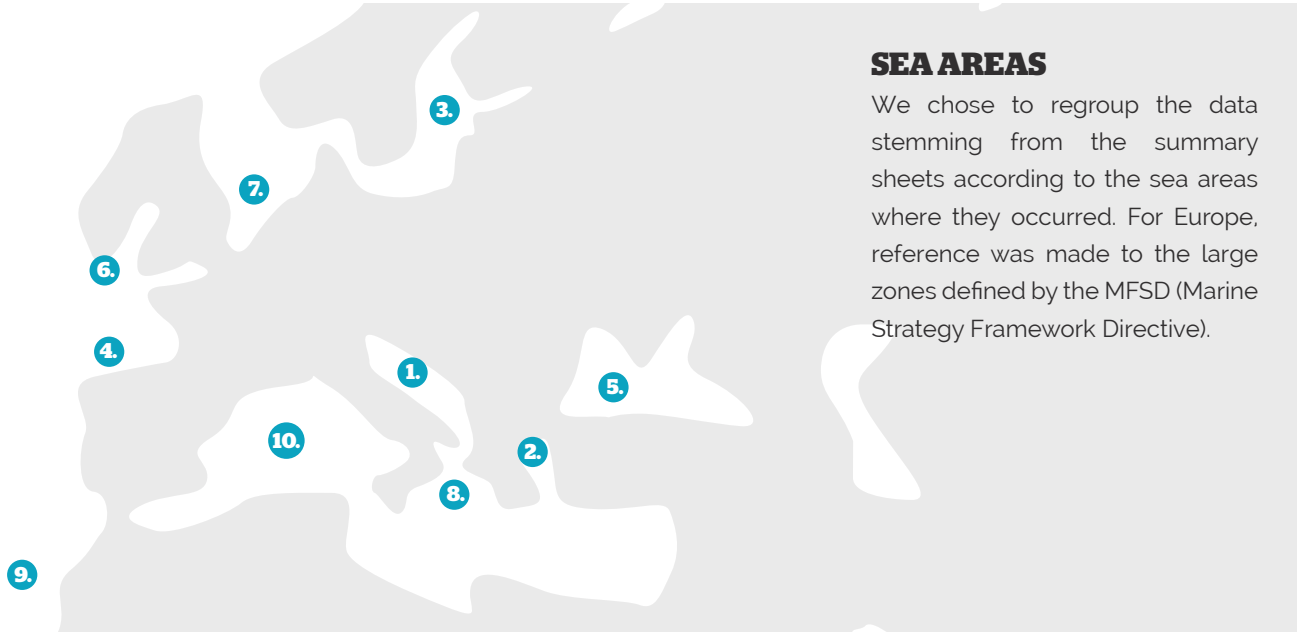
6. PLASTIC BOTTLES

REDISTRIBUTION OF WASTE BY SEA AREAS

Sea areas in which the collection was made, in terms of percentage

1. ADRIATIC SEA: 1,76%
2. AEGEAN SEA: 0,18%
3. BALTIC SEA: 1,23%
4. BAY OF BISCAY
+ IBERIAN COAST: 38,10%
5. BLACK SEA: 1,06%
6. CELTIC SEAS: 1,59%
7. NORTH SEA CHANNEL: 26,46%
8. IONIAN SEA: 0,88%
9. MACARONESIA: 0,71%
10. MEDITERRANEAN: 22,57%

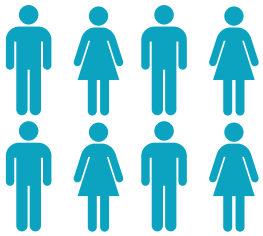
OUTSIDE ZONES DEFINED BY THE MFSD: 5,47%
NORTH ATLANTIC: 32,26%
SOUTH ATLANTIC: 16,13%
CARIBBEAN: 16,13%
GULF OF FINLAND: 3,23%
GULF OF MEXICO: 3,23%
INDIAN OCEAN: 19,35%
NORTH PAC: 3,23%
SOUTH PAC: 6,45%



SEA AREAS

We chose to regroup the data stemming from the summary sheets according to the sea areas where they occurred. For Europe, reference was made to the large zones defined by the MFSD (Marine Strategy Framework Directive).

PEOPLE SENSITISED



45366*
people have been sensitised.
15943* of them were schoolchildren.

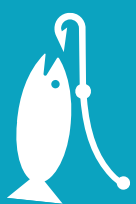
AREA COVERED

1 454 267 m*
travelled by the participants, so 1454,26 km.

TOP 10 OF WASTE 2014

7. COTTON SWABS

8. PIECES OF GLASS



9. FISHING RELATED WASTE

10. GLASS BOTTLES

ITEMS COLLECTED

In 2014, we asked the participants taking part in the Ocean Initiatives to quantify 25 types of litter during their actions in order to help us better understand the pollution created by marine litter around the world. These types of litter correspond to those which were reported most often during the 2013 edition. More than 16,600 people took part in the exercise. **The litter collected on the collections of more than half of the organizers was 75%-100% plastic litter.**

Total number of items collected in 478 actions: 50,968 quantified items (excluding industrial plastic granules).

PLASTIC

64496
CIGARETTE BUTTS

40259
BOTTLES

41310
PACKAGES

60347
PLASTIC BAGS

37371
COTTON SWABS

54906
PIECES OF POLYSTYRENE

551
TYRES

28842
FISHING LITTER

37371
SHELLFISH GATHERING LITTER

GLASS

12276
BOTTLES

29370
PIECES

METAL/ALUMINIUM

11822
CANS

5997
IRON

OTHER LITTER

6001
TABLEWARE PICNIC/STRAWS

5947
HYGIENE LITTER

2262
MEDICAL LITTER

2417
CLOTHES SHOES

1631
SHOTGUN SHELLS

8972
LOLLIPOP STICKS

405
BALLOONS

815
TOYS

2353
CIGARETTE LIGHTERS

77 561
NON-IDENTIFIABLE FRAGMENTS OF PLASTIC LITTER

OTHER LITTER IN LARGE QUANTITIES

Litter that has been encountered in large quantities by our participants in their areas:

30
veterinarian syringes on a Spanish beach in the Bay of Biscay

50
nappies on a Tunisian beach

10
plastic drums larger than one litre on a beach in Normandy (France)

15
batteries on a beach on Mauritius Island

EVENTS INFLUENCE

The organizers of the Ocean Initiatives have identified specific events as factors that may influence the quantity of litter found.

17% of organizers noted climatic events (floods, storms, large tides) as being a factor that could influence the amount of litter found.

6% of participants make a connection between the large amount of litter found and a specific event that happened before the collection (party, festival, protest)

46.8%

of the beaches examined were located close to a river or a stream. On the beaches close to the rivers, **202,013 items were collected, which is 56.9%** of the total amount of litter collected during the Ocean Initiatives 2014.

UNUSUAL OBJECTS - « STREAMS AND OCEANS: THE LARGEST DUMP OF HUMAN ACTIVITY »

477 large or unusual objects were found by the participants during the Ocean Initiatives (567 collections).

WELCOME TO THE SCRAPYARD

3 + 58

3 entire cars and 58 vehicle spare parts were found by the participants during the 567 collections.

Among the various spare parts, we found:

- **1 radiator**
- **1 damping system**
- **1 car axle**
- **2 car seats**
- **4 engines**
- **5 bumpers**
- **8 car batteries**
- **1 gearbox**
- **2 exhaust manifolds**
- **1 muffler**
- **3 windscreens**
- **1 headlight**

NEED EQUIPMENT?

42

Household Appliances and other electrical devices:

- **17 refrigerators and one refrigerator door**
- **1 cooler**
- **6 televisions**
- **4 washing machines and 4 drums**
- **3 computers**
- **1 microwave**
- **1 toaster**
- **1 coffee machine**
- **1 vacuum**

No need to spend a fortune on equipment before moving in-take a stroll along the rivers to get what you need!

AND ALSO...

7
UMBRELLAS

14
TROLLEYS

16
MATTRESSES

6
ROAD SIGNS

10
BOAT PIECES

7
BIKES

6
TOILETS AND
TOILET BOWLS

6
FIRE EXTINGUISHERS

3
MOWERS

3
SEX TOYS

BUT ALSO...

CONSTRUCTION MATERIAL AND CONSTRUCTION WASTE IN LARGE QUANTITIES

STEREOS

ONE FASHION DOLL

TWO PISTOLS

DRUG PARAPHERNALIA

ARMCHAIRS

ONE BOWLING BALL

ONE CRUTCH

WASHBASINS

ONE KAYAK

ONE ICE SKATE

ONE SAFE BOX

36% of large and unusual objects are found on the banks of the streams throughout Europe. It seems some people are using the banks as a rubbish dump.

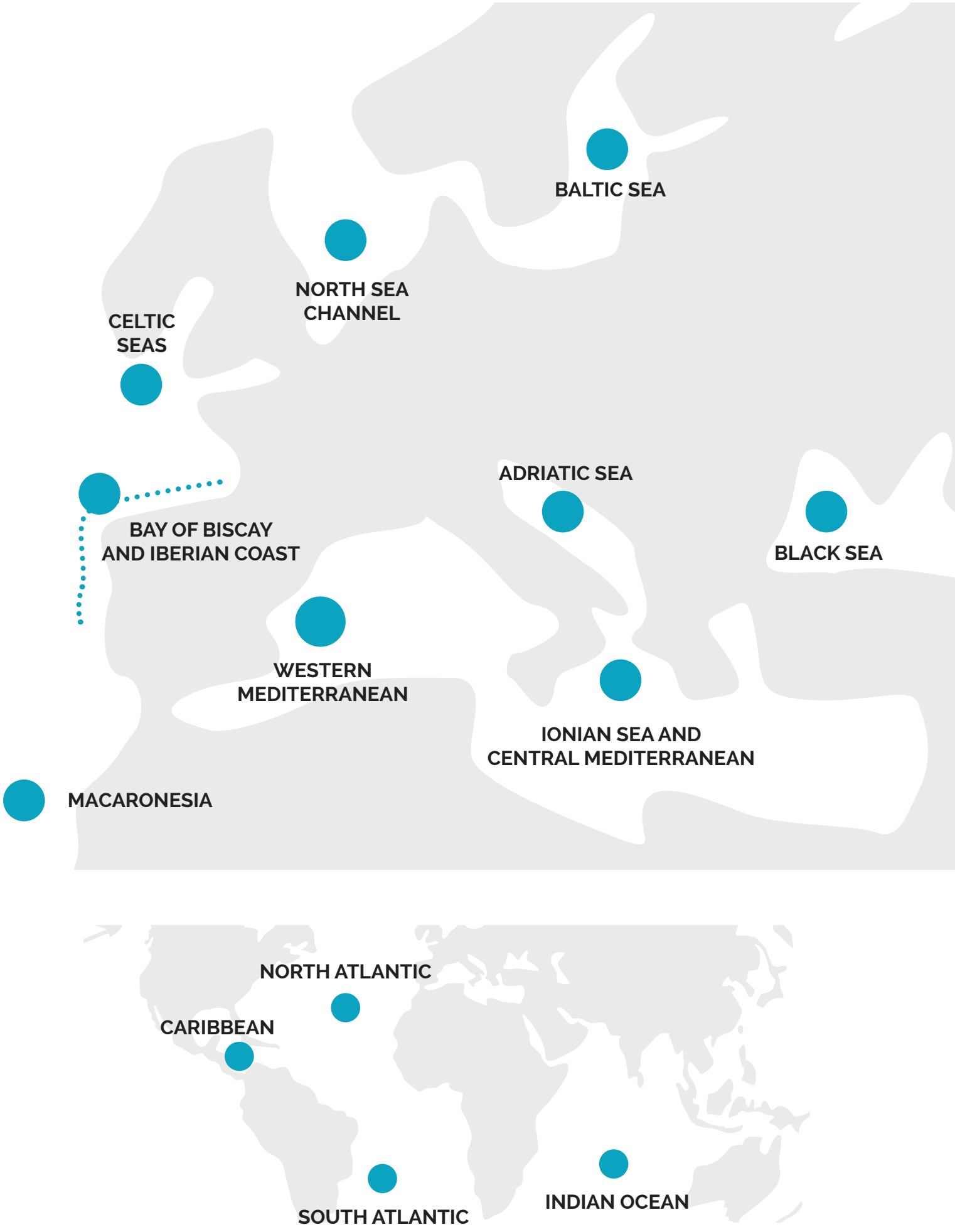
02
REPORT BY SEA AREAS

ZONES DEFINED BY THE MFSD

- **ADRIATIC SEA** (East coast of Italy, Slovenia, Croatia, Bosnia Herzegovina, Montenegro, Albania)
- **BALTIC SEA** (Germany, Denmark, Estonia, Finland, Latvia, Lithuania, Poland, Russia, Sweden)
- **BAY OF BISCAY AND IBERIAN COAST** (France from Point Penmarch, and the Atlantic coasts of Spain and Portugal)
- **BLACK SEA** (Bulgaria, Georgia, Romania, Russia, Turkey, Ukraine)
- **CELTIC SEAS** (Ireland, Wales, the west of England and Scotland).
- **NORTH SEA CHANNEL** (United Kingdom, the north of France, Belgium, the Netherlands, Denmark, the west of Germany, Norway, Sweden)).
- **IONIAN SEA AND CENTRAL MEDITERRANEAN** (Tunisia, Italy, Greece, Albania).
- **MACARONESIA** (archipelagos located west of Africa: Madeira Islands, Azores, and the Canary Islands)

OUTSIDE ZONES DEFINED BY THE MFSD

- **NORTH ATLANTIC**
- **WESTERN MEDITERRANEAN** (France, Spain, Italy, Morocco, Tunisia, Algeria.)
- **CARIBBEAN AREA** (Guadeloupe, Martinique)
- **INDIAN OCEAN** (Mayotte, La Reunion, Madagascar, Mauritius Island)
- **SOUTH ATLANTIC** (Argentina, Brazil)


BALTIC SEA
NORTH SEA CHANNEL
CELTIC SEAS
BAY OF BISCAY AND IBERIAN COAST
ADRIATIC SEA
BLACK SEA
WESTERN MEDITERRANEAN
IONIAN SEA AND CENTRAL MEDITERRANEAN
MACARONESIA
NORTH ATLANTIC
CARIBBEAN
SOUTH ATLANTIC
INDIAN OCEAN

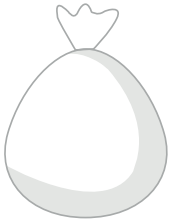
ADRIATIC SEA

East cost of Italy, Slovenia, Croatia, Bosnia Herzegovina, Montenegro, Albania

52% rate of return. The collections took place exclusively in Italy.

* Numbers with an asterisk are derived from extrapolations made from **10 reports** filed before October 27th 2014, from more than **17 collections** organized in this area.

LITTER COLLECTED



747*
bags of litter were collected by the participants.

59.88 m³*
Total volume of litter collected

PEOPLE SENSITISED

844*
people sensitised, schoolchildren and general public combined.

AREA COVERED

31 733 m*
travelled by the participants, so 31,733km.

TOP 5

6,547 items were collected during 7 collections (rivers, beaches...)
Top 5 most commonly found items in the Adriatic Sea according to the data provided by the organizers:

1430
NON-IDENTIFIABLE FRAGMENTS OF PLASTIC LITTER

1020
SHELLFISH GATHERING LITTER

1009
PIECES OF POLYSTYRENE

790
PLASTIC BAGS and fragments of plastic bags

470
PLASTIC BOTTLES

MAKE
SOME
THING
COOL

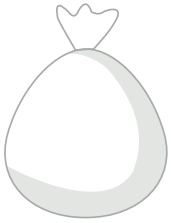
BALTIC SEA

Germany, Denmark, Estonia, Finland, Latvia, Lithuania, Poland, Russia, Sweden

41% rate of return. The collections in Germany, Latvia and Denmark took place exclusively on beaches.

* Numbers with an asterisk are derived from extrapolations made from **7 reports** filed before October 27th 2014, from more than **17 collections** organized in this area.

LITTER COLLECTED



189*

bags of litter were collected by the participants.

9 m³*

Total volume of litter collected

PEOPLE SENSITISED

395*

people sensitised, schoolchildren and general public combined.

AREA COVERED

40 071 m*

travelled by the participants, so 40,071 km.

TOP 5

2,318 items collected during 6 collections

Top 5 most commonly found items in the Baltic Sea according to the data provided by our organizers:

759
CIGARETTE BUTTS

455
PIECES OF GLASS

326
PLASTIC BAGS and fragments of plastic bags

272
PACKAGES (wrappers...)

250
NON-IDENTIFIABLE FRAGMENTS OF PLASTIC LITTER

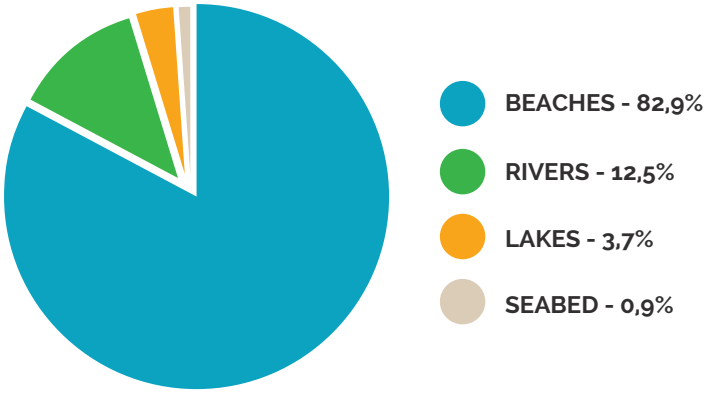
BAY OF BISCAY AND IBERIAN COAST

France from Point Penmarch, and the Atlantic coasts of Spain and Portugal.

42% rate of return, so reports from 216 collections. The collections took place in France (78%), Spain (20%) and Portugal (2%).

* Numbers with an asterisk are derived from extrapolations made from **254 reports** filed before October 27th 2014, from more than **515 collections** organized in this area.

TYPE OF COLLECTION



LITTER COLLECTED

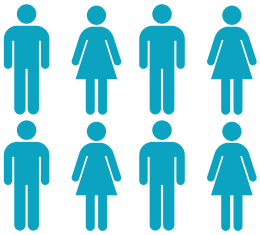
12484*

bags of litter were collected by the participants on the Bay of Biscay and Iberian Coasts.

1348.50m³*

Total volume of litter collected.

PEOPLE SENSITISED



16056*

people have been sensitised. **5925*** of them were schoolchildren. on the Bay of Biscay and Iberian Coasts

AREA COVERED

596 637m*

travelled by the participants, so 596 km.

TOP 5

207662 items collected during 178 collections.
Top 5 most commonly found items in the Bay of Biscay and Iberian Coast according to the data provided by our organizers:

33205
PIECES OF POLYSTYRENE

29 034
COTTON SWABS

28 219
NON-IDENTIFIABLE FRAGMENTS OF PLASTIC LITTER

25082
PLASTIC BAGS and fragments of plastic bags

17 435
FISHING-RELATED LITTER (nets, hooks, lines...)

FOCUS: RIVER AND LAKES - BAY OF BISCAY AND IBERIAN COAST

947 bags were collected during 35 quantification collections carried out on the rivers and lakes of the Bay of Biscay and Iberian Coast area. **The total volume collected was 47.815 m³.**

21388 ITEMS COLLECTED

10718
NON-IDENTIFIABLE FRAGMENTS OF PLASTIC LITTER

2359
PIECES OF GLASS

1945
PLASTIC BAGS and fragments of plastic bags

1661
PLASTIC BOTTLES

1090
GLASS BOTTLES

676
PACKAGES (wrappers...)

544
LITTER LINKED TO HYGIENE ASIDE FROM COTTON SWABS (condoms, tampons, personal care products)

528
ALUMINIUM CANS

449
CIGARETTE BUTTS

432
PIECES OF POLYSTYRENE

406
PIECES OF IRON OR SCRAP IRON

120
FISHING-RELATED LITTER (nets, hooks, lines...)

111
TABLEWARE PICNIC/STRAWS

72
CLOTHES SHOES

56
CIGARETTE LIGHTERS

52
TYRES

47
TOYS

41
LOLLIPOP STICKS

40
COTTON SWABS

18
MEDICAL LITTER (suppositories, syringes...)

14
SHELLFISH GATHERING LITTER

9
SHOTGUN SHELLS

0
BALLOON

100%
of the rivers monitored by our organizers are fishing areas.

61%
of the rivers monitored by our organizers are areas where a lot of hunting occurs.

ORIGIN

We asked the organizers to explain to us, in their opinion, the origin of the litter found:

59%

of the people questioned think that the litter that they found is abandoned on the spot and linked to certain individuals (parties, illegal dumping...)

31%

of the people questioned think that the litter they found can be explained by the presence of one or more towns or villages upstream from the area.

18%

of the people questioned made a connection between the floods from the river and the excess of litter found, either because the floods eroded old dumps or because they affected recycling centres in the villages.

TESTIMONIAL

Tulles Kayak Club, boat clean up on the River Corrèze

«During spring clean-up actions from boats on the River Corrèze the discovery of a washing machine, 2 trolleys, a plastic sink and even a cast iron cauldron really made an impact! We also gathered over 40 tyres, 8500 litres of plastic bottles, 2000 litres of glass bottles, 8m³ of scrap iron and 6 parts of car bodywork.

With the marine litter we found on the Corrèze we created a sculpture of a whale which was displayed in the town for a week to raise awareness among the local population. A second picture which is quite impressive: a raft which has barely enough space for the helmsman.

We will of course be on board for 2015 even if we hope and fight for greater action on the part of the local authorities. We cleaned up 1/2 a tonne of marine litter from the river again yesterday with students...»

FOCUS: BEACHES AND SEABEDS - BAY OF BISCAY AND IBERIAN COAST

4287 bags were collected during 35 quantification collections carried out on the beaches and seabed of the Bay of Biscay/Iberian Coast area. **The total volume collected was 282.109 m³.**

95 235 ITEMS COLLECTED

32766
PIECES OF POLYSTYRENE

28991
COTTON SWABS

23017
PLASTIC BAGS and fragments of plastic bags

17495
NON-IDENTIFIABLE FRAGMENTS OF PLASTIC LITTER

17285
FISHING-RELATED LITTER (nets, hooks, lines...)

8415
CIGARETTE BUTTS

7288
PLASTIC BOTTLES

6972
PACKAGES (wrappers...)

4169
LOLLIPOP STICKS

4048
PIECES OF GLASS

3491
SHELLFISH GATHERING LITTER

1891
GLASS BOTTLES

1773
LITTER LINKED TO HYGIENE ASIDE FROM COTTON SWABS (condoms, tampons, personal care products)

1516
ALUMINIUM CANS

1420
MEDICAL WASTE (suppositories, syringes...)

1110
PIECES OF IRON OR SCRAP IRON

677
CIGARETTE LIGHTERS

547
SHOTGUN SHELLS

412
CLOTHES
SHOES

18407
TABLEWARE
PICNIC/STRAWS

195
TOYS

93
TYRES

42
BALLOONS

Among the most representative activities of the area we find:

1. Nautical activities (leisure, surf, kayak...)
2. Fishing activities
3. Port activities
4. Shellfish gathering activities

74.6% of the beaches monitored in the Bay of Biscay and Iberian Coast area are located in the vicinity of a city.

38.5% of the organizers mentioned exceptional natural events from the beginning of the year (storms, king tides, tidal waves, and heavy rainfall which caused floods and spates...) as factors that could aggravate the presence of litter.

TESTIMONIALS

AINES ARIZMENDI, SAN SEBASTIÁN (SPAIN)

«As part of the Ocean Initiatives, we began a study on aquatic litter on three beaches in the Spanish Basque Country thanks to clean-up activities, quantification and characterisation of the marine litter in line with the OSPAR protocol.

The endeavor was carried out by various volunteers from the Red Cross participating in a social reintegration programme in San Sebastián, by individuals from the Atzegi association (victims of cerebal palsy) in Zumaia and by an association of retired people in Mutriko.

The aim of these actions undertaken on a monthly basis is to promote participative science (involving citizens in scientific research) in order to collect the necessary data to better understand the circulation of marine litter in the Bay of Biscay and to further social integration of individuals excluded from certain types of activities»

FRANCISCO VÁLGA, TORREIRA BEACH PORTUGAL

«This is what the ocean deposits on the beach in winter. Outside of the summer period, we become aware of marine litter pollution as the beaches are not cleaned.»

INTERESTING FACTS :

During winter storms (end of 2013/beginning of 2014), more than 600 transport containers fell into the sea. Besides being a danger for other carriers on the water, some were ripped open by the waves and dispersed large quantities of unusual waste on the coastline of the Bay of Biscay. Thus, in the south of Brittany, thousands of syringes, fish food packages, bottles of anti-aging skin cream and hotel slippers were found on beaches during the following months.

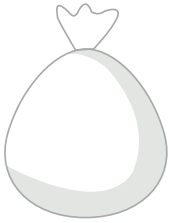
BLACK SEA

Bulgaria, Georgia, Romania, Russia, Turkey, Ukraine

37.5% rate of return. The collections in Bulgaria took place exclusively on beaches, and two collections were carried out in Germany on the Danube River that flows into the Black Sea.

* Numbers with an asterisk are derived from extrapolations made from **6 reports** filed before October 27th 2014, from more than **16 collections** organized in this area.

LITTER COLLECTED



557*
bags of litter were collected by the participants.

37.52 m³*
Total volume of litter collected

PEOPLE SENSITISED

872*
people sensitised, schoolchildren and general public combined.

AREA COVERED

8800 m*
travelled by the participants, so 8,80 km.

TOP 5

4351 items were collected during 6 collections (rivers, beaches...)
Top 5 most commonly found litter items in the Black Sea according to the data provided by our organizers:

1655
CIGARETTE BUTTS

855
PLASTIC BOTTLES

526
PACKAGES (wrappers...)

440
PLASTIC BAGS and fragments of plastic bags

229
PIECES OF GLASS

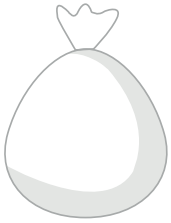
CELTIC SEAS

Ireland, Wales, West of England and Scotland

47% rate of return. The collections mostly took place in Ireland (on both beaches and rivers). One collection was carried out on the West Coast of England.

* Numbers with an asterisk are derived from extrapolations made from **8 reports** filed before October 27th 2014, from more than **17 collections** organized in this area.

LITTER COLLECTED



378*
bags of litter were collected by the participants.

26.11 m³*
Total volume of litter collected

PEOPLE SENSITISED

315*
people sensitised, schoolchildren and general public combined.

AREA COVERED

4250 m*
travelled by the participants, so 4,250 km.

TOP 5

3206 items were collected during 7 collections (rivers, beaches...)
Top 5 most commonly found items in the Celtic Seas according to the data provided by our organizers:

594
PACKAGES (wrappers...)

434
PLASTIC BOTTLES

424
ALUMINIUM CANS

310
NON-IDENTIFIABLE FRAGMENTS OF PLASTIC LITTER

308
COTTON SWABS

TESTIMONIAL

AGNIESZKA PIWOWARCZYK, NORTH BULL ISLAND, (ISLAND IN DUBLIN BAY, IRELAND)

«I organized three clean-up actions this year on Bull Island which is a UNESCO-designated biosphere reserve. The marine litter washed up on the beach and in the area is connected to the high tides and/or storms this spring. The majority of the litter found was household marine litter but we also found non-identified litter. We even collected blue balls that are used in nuclear power stations. It is difficult to identify the origin of the litter collected as it can travel long distances in the ocean.»

INTERESTING FACTS : In the past few years, mysterious blue foam balls have been appearing on beaches in the United Kingdom. After research led by NGOs such as Surfers Against Sewage, the mystery has been solved. They are "Taprogge Balls" used in power plants, nuclear power plants and other industrial installations to clean pipes. **www.sas.org.uk/campaign/ufos**

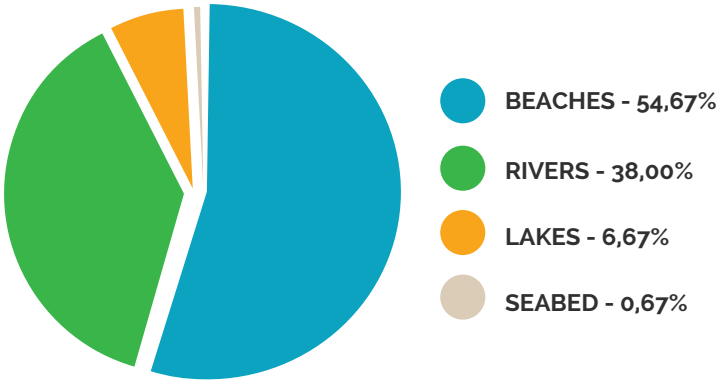
NORTH SEA CHANNEL

United Kingdom, North of France, Belgium, Holland, Denmark, West Germany, Norway, Sweden

52.2% rate of return, so reports from 152 collections. The collections took place in France (75.33%), Belgium (12.67%), Germany (6%), Holland (5.33%) and Norway (0.67%)

* Numbers with an asterisk are derived from extrapolations made from **172 reports** filed before October 27th 2014, from more than **291 collections** organized in this area.

TYPE OF COLLECTION



LITTER COLLECTED

6891* bags of litter were collected by the participants in the Channel/North Sea zone.

891.64m³* Total volume of litter collected

PEOPLE SENSITISED

9300* people have been sensitised. **1147*** of them were schoolchildren, on the Channel/North Sea zone.

AREA COVERED

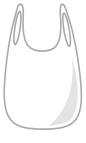
456773m* travelled by the participants, so 456.77 km

TOP 5

180 887 items were collected during 130 collections (all collections combined). Top 5 most commonly found items in the North Sea Channel zone, according to the data provided by our organizers (lakes, rivers, beaches and seabed):

14846 NON-IDENTIFIABLE FRAGMENTS OF PLASTIC LITTER

8883 CIGARETTE BUTTS



8203 PLASTIC BAGS and fragments of plastic bags

7326 PIECES OF POLYSTYRENE

7337 PLASTIC BOTTLES

FOCUS: RIVER AND LAKES - NORTH SEA CHANNEL

1,445 bags were collected during 67 quantification collections carried out on the rivers and lakes of the North Sea Channel. **The total volume collected is 246.52 m³.**

33 645 ITEMS COLLECTED

8160
NON-IDENTIFIABLE FRAGMENTS OF PLASTIC LITTER

5013
PLASTIC BOTTLES

3795
PLASTIC BAGS and fragments of plastic bags

2785
PACKAGES (wrappers...)

2307
CIGARETTE BUTTS

2232
GLASS BOTTLES

2122
PIECES OF POLYSTYRENE

1402
ALUMINIUM CANS

1393
COTTON SWABS

1243
PIECES OF GLASS

840
LITTER LINKED TO HYGIENE ASIDE FROM COTTON SWABS (condoms, tampons, personal care products)

508
PIECES OF IRON OR SCRAP IRON

400
LOLLIPOP STICKS

315
CIGARETTE LIGHTERS

290
FISHING-RELATED LITTER (nets, hooks, lines...)

153
MEDICAL LITTER (suppositories, syringes...)

148
TABLEWARE PICNIC/STRAWS

145
SHELLFISH GATHERING LITTER

97
CLOTHES SHOES

81
SHOTGUN SHELLS

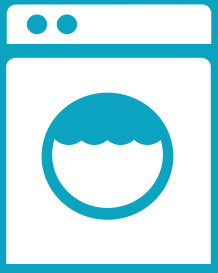
56
TOYS

30
TYRES

30
BALLOONS

50%

Large amounts of litter (bulky refuse) were found in more than 50% of the collections undertaken on the banks of streams of the North Sea Channel area.



ORIGIN

We asked the organizers to explain to us, in their opinion, the origin of the litter found:

ABANDONED ON THE SPOT OR UPSTREAM

According to the organizers, the litter found in the rivers is abandoned on the spot or upstream in the cities and towns and is linked to thoughtless and indifferent actions. Many elements of the lake and river areas can explain, in part, the great amount of litter found: leisure activities (fishing, tourism, swimming), the presence of homes or schools close to the river, large cities upstream, parties and gatherings (barbecues)...

FLOODS

The floods of the streams in the area have increased the amount of litter found and its dispersal towards the marine environment.

TESTIMONIAL

Ann-Laure Furnelle, Huldenberg, Dyle Valley Belgium.

For the past two years, Ann-Laure sorts and recycles waste on a volunteer basis in the Dyle Valley in Belgium.

«In addition to cans and bottles, in general, you can find anything. Containers filled with motor oil, medication, fire extinguishers,, USB sticks, mobile phones, bank cards that are most likely dumped by thieves, broken toys, etc. Hundreds of flower pots, half a Citroën, ventilation tubes from a cannabis plantation in a nature reserve, snack packaging with a 1983 best before date. In total in the month of October I gathered 22.5kg of iron and aluminium cans over 16 km of road. We are always driven to consume more but consumers are never told "Attention, dispose of it properly". We never think about the end of its journey.»

Extract of report (in French): http://www.rtl.be/info/vous/temoignage/1136812/ne-pas-publier-ann-laure

FOCUS: BEACHES AND SEABEDS - NORTH SEA CHANNEL

2,107 bags were collected during 83 quantification collections carried out on the beaches and seabed of the North Sea Channel area. **The total volume collected was 212.99 m³.**

147 242 ITEMS COLLECTED

6686
NON-IDENTIFIABLE FRAGMENTS OF PLASTIC LITTER

6527
CIGARETTE BUTTS

5907
FISHING-RELATED LITTER (nets, hooks, lines...)

5622
PACKAGES (wrappers...)

5204
PIECES OF POLYSTYRENE

4408
PLASTIC BAGS and fragments of plastic bags

2324
PLASTIC BOTTLES

1463
PIECES OF GLASS

1409
COTTON SWABS

904
PIECES OF IRON OR SCRAP IRON

827
LOLLIPOP STICKS

807
GLASS BOTTLES

767
ALUMINIUM CANS

501
SHOTGUN SHELLS

471
SHELLFISH GATHERING LITTER

445
CLOTHES SHOES

322
LITTER LINKED TO HYGIENE ASIDE FROM COTTON SWABS (condoms, tampons, personal care products)

213
CIGARETTE LIGHTERS

195
MEDICAL LITTER (suppositories, syringes...)

176
TABLEWARE PICNIC/STRAWS

113
BALLOONS

53
TYRES

37
TOYS

73.5%

of the beaches monitored in the North Sea Channel area are located in the vicinity of a city.

19.28%

of the organizers mentioned exceptional natural events from the beginning of the year (storms, king tides, tidal wave, and heavy rainfall which caused floods and spates...) as factors that could aggravate the presence of litter.

TESTIMONIAL

Laurent Colasse, Association Mal de Seine, Normandy (France)

*«**Coastal pollution by industrial plastic resin pellets is present along the whole west coast.** This river pollution becomes maritime pollution and for the most part drifts towards the north, while spreading out and being dispersed on the coastline under the effect of tides, wave action and wind (they fly towards land!). Road transport losses cannot be downplayed: the pellets found along the coastline are Polyethylene or Polypropylene, they can easily float from ditches to rivers and then drift to the sea. As industrial pellets are mainly white to transparent the background noise is barely visible in sediment or in the water for the uninitiated. Nevertheless this type of pollution is alarming as it is impossible to clean up:*
http://vimeo.com/46594524 Big One - Hong-Kong 2012

In the area covering the Channel and the North Sea from Mont Saint-Michel Bay to the Cotentin Peninsula, the pellets mix with shellfish farms. From Cherbourg to Dunkirk (and Texel island in the Netherlands), the characteristic strange black pellets are well detected in the supralittoral zone (except in shingle). It is the greatest detectable maritime loss.

The Seine bay is a hot spot for pellet escape due to upstream losses along the Seine and in coastal rivers (Production - Transport - Processing - Recycling waste). The pellets mix with those from the industrial and port area in Le Havre to visibly pollute the Bay of Somme and the Opal Coast (they are not immediately visible in the shingle in the Pays de Caux area). Heavy maritime traffic in the Calais strait and the tides in the area also explain their abundant presence. (Portel Beach).
http://maldeseine.free.fr/granules_plastiques_industriels_page_speciale.html (in French).»

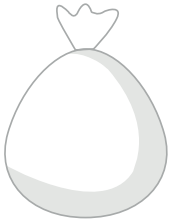
IONIAN SEA AND CENTRAL MEDITERRANEAN

Tunisia, Italy, Greece, Albania

50% rate of return. Most of the collections took place in Italy, exclusively in marine environments (one collection underwater). One collection took place in Tunisia.

* Numbers with an asterisk are derived from extrapolations made from **5 reports** filed before October 27th 2014, from more than **10 collections** organized in this area.

LITTER COLLECTED



412*

bags of litter were collected by the participants.

22.94 m^3*

Total volume of litter collected

PEOPLE SENSITISED

620*

people sensitised, schoolchildren and general public combined.

AREA COVERED

3900 m*

travelled by the participants, so 3,90 km.

TOP 5

5641 items were collected during 5 collections (beaches, underwater...)

Top 5 most commonly found litter items in the Ionian Sea according to the data provided by our organizers:

650

NON-IDENTIFIABLE FRAGMENTS OF PLASTIC LITTER

520

PIECES OF IRON OR SCRAP IRON

518

FISHING-RELATED LITTER (nets, hooks, lines...)

520

PIECES OF GLASS

500

PLASTIC BAGS and fragments of plastic bags

TESTIMONIAL

MARC, TARA EXPEDITION, AIN MARIEM RESORT BEACH, TUNISIA.

«I was shocked by the quantity and nature of the marine litter collected» stresses Marc, «almost a tonne of refuse of all kinds was gathered in barely 2 hours: hundreds of dirty nappies buried in the sand, cigarette butts, lighters, glass, clothes, plastic bottles and bottle tops. We filled 100 large rubbish bags.»

http://oceans.taraexpeditions.org/

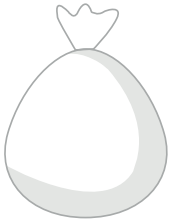
MACARONESIA

Archipelagos located west of Africa: Madeira Islands, Azores, and the Canary Islands

57% rate of return. The collections mostly took place on the beaches of the archipelago of the Canary Islands (Spain)

* Numbers with an asterisk are derived from extrapolations made from **4 reports** filed before October 27th 2014, from more than **7 collections** organized in this area.

LITTER COLLECTED



228*

bags of litter were collected by the participants.

9.48 m³*

Total volume of litter collected

PEOPLE SENSITISED

358*

people sensitised, schoolchildren and general public combined.

AREA COVERED

6600 m*

travelled by the participants, so 6,60 km.

TOP 5

4580 items were collected during 3 collections (beaches).
Top 5 most commonly found items in Macaronesia according to the data provided by our organizers:

1250

NON-IDENTIFIABLE FRAGMENTS OF PLASTIC LITTER

1100

LITTER LINKED TO HYGIENE ASIDE FROM COTTON SWABS (condoms, tampons, personal care products)

500

CIGARETTE BUTTS

330

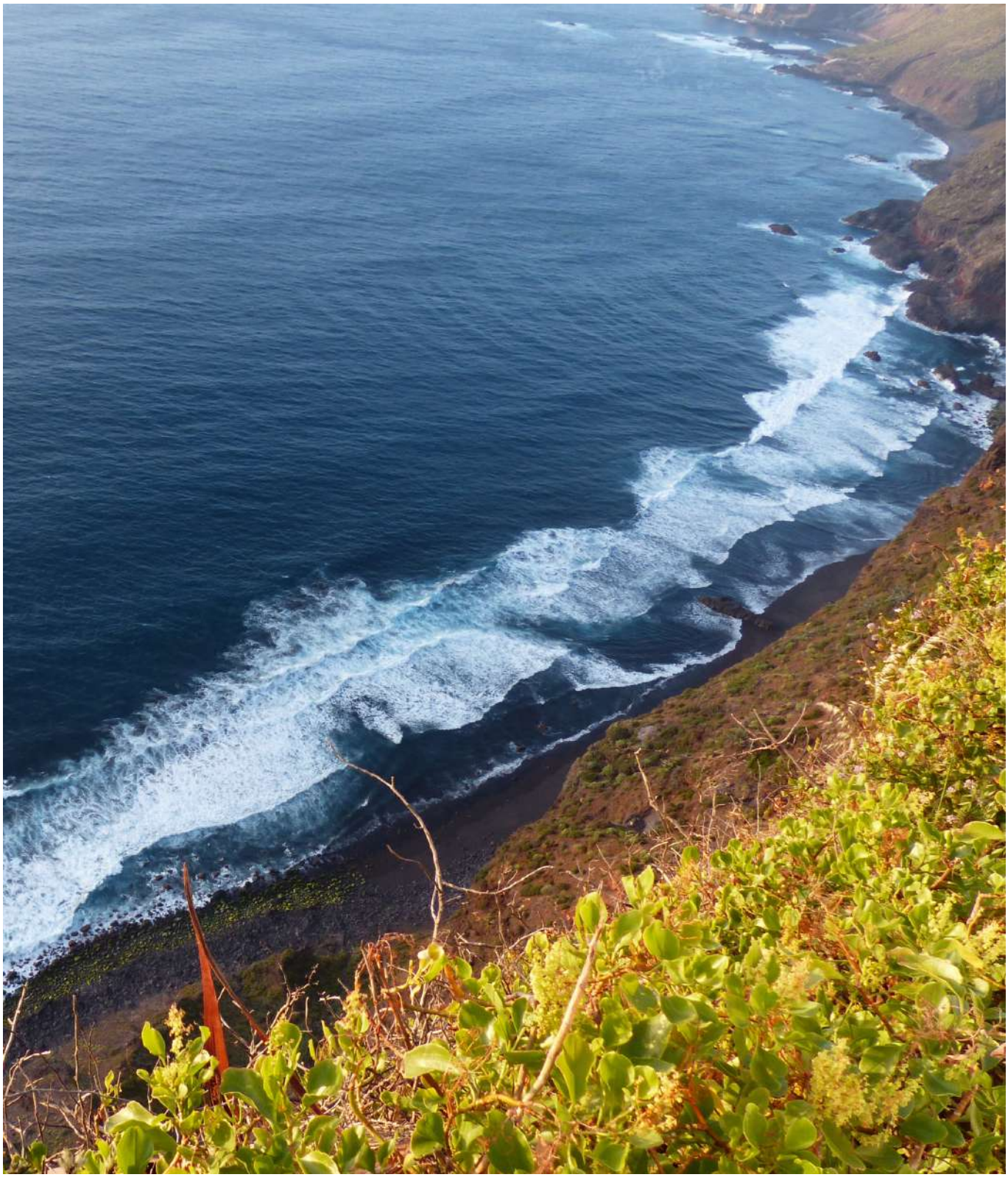
PLASTIC BAGS and fragments of plastic bags

245

ALUMINIUM CANS

INTERESTING FACTS

Plenty of industrial plastic granules or «mermaid's tears» have been found in the Canary Islands.



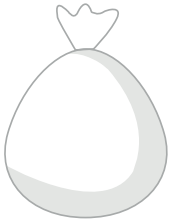
NORTH ATLANTIC

Guyana, Morocco

50% rate of return. The collections mostly took place on the Moroccan beaches and one in French Guyana.

* Numbers with an asterisk are derived from extrapolations made from **10 reports** filed before October 27th 2014, from more than **20 collections** organized in this area.

LITTER COLLECTED



812*

bags of litter were collected by the participants.

122 440 m³*

Total volume of litter collected

PEOPLE SENSITISED

3324*

people have been sensitised. **1446*** of them were schoolchildren, on the Atlantic North zone.

AREA COVERED

46700 m*

travelled by the participants, so 46,700 km.

TOP 5

10 689 items were collected during 8 collections (beaches)

Top 5 most commonly found items in the North Atlantic according to the data provided by our organizers:

2487

CIGARETTE BUTTS

1736

FISHING-RELATED LITTER (nets, hooks, lines...)

1631

PLASTIC BAGS and fragments of plastic bags

1045

NON-IDENTIFIABLE FRAGMENTS OF PLASTIC LITTER

658

PACKAGES (wrappers...)

OCEAN INITIATIVES
SURFRIDER
www.oceaninitiatives.org
COUNTRYSIDE
CITY
BEACH
Y&R

OCEAN INITIATIVES
SURFRIDER
www.oceaninitiatives.org

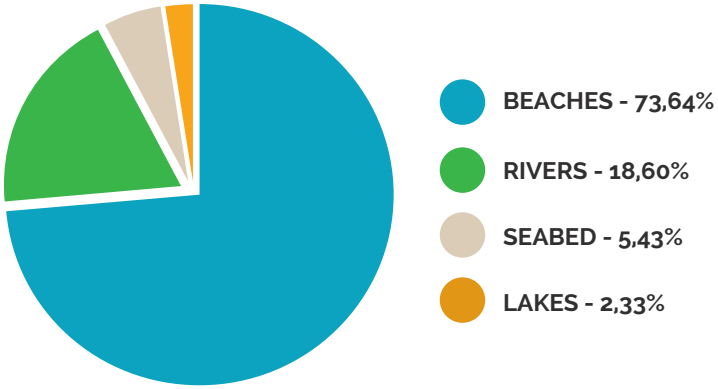
WESTERN MEDITERRANEAN

France, Spain, Italy, Morocco, Tunisia, Algeria

44.24% rate of return, so 129 collections. The collections took place in France (62.79%), Italy (18.60%), Spain including the Balearic Islands (9.30%), Switzerland and the Rhone watershed (3.88%), Algeria (3.10%) and Tunisia (2.33%)

* Numbers with an asterisk are derived from extrapolations made from **147 reports** filed before October 27th 2014, from more than **278 collections** organized in this area.

TYPE OF COLLECTION

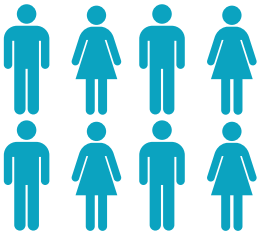


LITTER COLLECTED

7706.42*
bags of litter were collected by the participants on the Western Mediterranean Gulf.

540.31 m³*
Total volume of litter collected

PEOPLE SENSITISED



10 441*
people have been sensitised.
3698* of them were schoolchildren, on the Western Mediterranean Gulf.

AREA COVERED

226 494.57 m*
travelled by the participants, so 226,494 km.

TOP 5

154,584 items were collected during 111 collections (all collections combined). Top 5 most commonly found litter items in the Western Mediterranean zone, according to the data provided by our organizers (lakes, rivers, beaches and seabeds):

37292
CIGARETTE BUTTS

19216
PLASTIC BAGS and fragments of plastic bags

18033
PIECES OF GLASS

17116
PACKAGES (wrappers...)

16891
NON-IDENTIFIABLE FRAGMENTS OF PLASTIC LITTER

FOCUS: RIVER AND LAKES - WESTERN MEDITERRANEAN

1,436 bags were collected during 27 quantification collections carried out on the rivers and banks of rivers and lakes of the Western Mediterranean. **The total volume collected was 121.615 m³.**

17319 ITEMS COLLECTED

2842
PACKAGES (wrappers...)

2635
CIGARETTE BUTTS

2146
PLASTIC BOTTLES

2075
PLASTIC BAGS and fragments of plastic bags

1402
ALUMINIUM CANS

1637
PIECES OF POLYSTYRENE

995
GLASS BOTTLES

962
NON-IDENTIFIABLE FRAGMENTS OF PLASTIC LITTER

672
PIECES OF GLASS

387
PIECES OF IRON OR SCRAP IRON

300
LITTER LINKED TO HYGIENE ASIDE FROM COTTON SWABS (condoms, tampons, personal care products)

233
TABLEWARE PICNIC/STRAWS

209
CLOTHES SHOES

110
LOLLIPOP STICKS

93
CIGARETTE LIGHTERS

85
TOYS

61
MEDICAL LITTER (suppositories, syringes...)

58
FISHING-RELATED LITTER (nets, hooks, lines...)

54
SHOTGUN SHELLS

35
TYRES

30
COTTON SWABS

22
SHELLFISH GATHERING LITTER

12
BALLOONS

18.5%

In 18.5% of the collections, the participants have signalled specific events (exceptional natural phenomena or gathering of individuals linked to an event) as being an aggravating factor for the presence of litter on the banks of rivers and lakes of the Mediterranean zone.

88.9%

of the rivers and lakes examined are located in the immediate vicinity of a city.

7 + 5

7 spare parts from a car and 5 dumped scooters and bicycles were found in the rivers and lakes of the Mediterranean zone.

FOCUS: BEACHES - WESTERN MEDITERRANEAN

2,026 bags were collected during 94 quantification collections carried out on the beaches of the Western Mediterranean. **The total volume collected was 121.08 m³.**

136 082 ITEMS COLLECTED

34508
CIGARETTE BUTTS

17333
PIECES OF GLASS

16900
PLASTIC BAGS and fragments of plastic bags

15929
NON-IDENTIFIABLE FRAGMENTS OF PLASTIC LITTER

14148
PACKAGES (wrappers...)

9891
PIECES OF POLYSTYRENE

7570
PLASTIC BOTTLES

4563
COTTON SWABS

3176
ALUMINIUM CANS

2713
GLASS BOTTLES

1982
TABLEWARE PICNIC/STRAWS

827
LOLLIPOP STICKS

1417
PIECES OF IRON OR SCRAP IRON

1330
FISHING-RELATED LITTER (nets, hooks, lines...)

685
SHELLFISH GATHERING LITTER

461
LITTER LINKED TO HYGIENE ASIDE FROM COTTON SWABS (condoms, tampons, personal care products)

451
CIGARETTE LIGHTERS

413
CLOTHES SHOES

351
SHOTGUN SHELLS

239
MEDICAL LITTER (suppositories, syringes...)

145
BALLOONS

134
TOYS

108
TYRES

81%

of the beaches monitored in the Western Mediterranean are in areas that are frequently visited by tourists.

31.6%

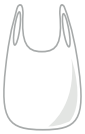
With regards to the marine activities taking place in the area, 31.6% of the organizers noted a development of recreational boating (marina, port, anchorage...) in the area.

FOCUS: SEABEDS - WESTERN MEDITERRANEAN

It is in the Western Mediterranean that we find the most seabed collections (7 collections, one including diving). The divers came back to the surface with **114 bags filled** with litter, representing a total volume of 8.025 m³.

1182 ITEMS COLLECTED

396
PLASTIC BOTTLES



241
PLASTIC BAGS and fragments of plastic bags

149
CIGARETTE BUTTS

116
PACKAGES (wrappers...)

68
ALUMINIUM CANS

46
PIECES OF IRON OR SCRAP IRON

32
GLASS BOTTLES

31
LITTER LINKED TO HYGIENE ASIDE FROM COTTON SWABS (condoms, tampons, personal care products)

30
FISHING-RELATED LITTER (nets, hooks, lines...)

28
PIECES OF GLASS

22
PIECES OF POLYSTYRENE

11
TYRES

6
TABLEWARE PICNIC/STRAWS

2
TOYS

2
CIGARETTE LIGHTERS

2
CLOTHES SHOES

The divers also found a shipwreck, a car battery and pieces of a mobile home.

TESTIMONIAL

SOFIANE BENHARIGA BARBAROUS ASSOCIATION, ORAN ALGERIA

«During the collection of the seabed, which is carried out regularly, some unusual objects are sometimes found. One day I found a diving mask and an old telephone covered in concrete. The funny thing is that I lost my brand new Samsung Galaxy S4 overboard in a watertight bag, it must have made someone's day. As the saying goes: «one man's trash is another man's treasure» but the telephone I found doesn't work that well!»

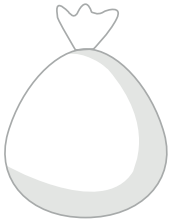
CARIBBEAN AREA

Guadeloupe, Martinique

31.25% rate of return. The collections took place mostly in a marine environment on the beaches of Guadeloupe and Martinique (two collections onshore and one seabed)

* Numbers with an asterisk are derived from extrapolations made from **5 reports** filed before October 27th 2014, from more than **16 collections** organized in this area.

LITTER COLLECTED



1139* bags of litter were collected by the participants.

117.504 m³* Total volume of litter collected

PEOPLE SENSITISED

1366* people sensitised, schoolchildren and general public combined.

AREA COVERED

14080 m* travelled by the participants, so 14,080 km.

TOP 5

In total, 3079 items were collected by our participants on 5 collections.
Top 5 most commonly found items during the quantification undertaken in the Caribbean area:

1310 PLASTIC BAGS and fragments of plastic bags

620 PLASTIC BOTTLES

300 FISHING-RELATED LITTER (nets, hooks, lines...)

170 PIECES OF GLASS

170 PACKAGES (wrappers...)

TESTIMONIAL

NOÉMI FROM THE SURFRIDER MARTINIQUE BRANCH, SOUTHERN MARTINIQUE

«We organized a clean-up action on the south of the island in partnership with a tourism stakeholder who offers excursions at sea in an idyllic setting, the participants all know the site but they don't suspect that this dream location hides 2.4 tonnes of all kinds of litter! A really great experience for all those people who know the area without realizing the extent of the damage!»

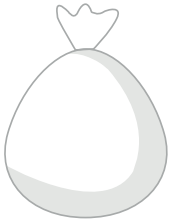
INDIAN OCEAN

Mayotte, La Reunion, Madagascar, Mauritius Island

40 % rate of return. The collections took place exclusively on the beaches of La Reunion (3 collections), Mayotte (one collection), Madagascar (one collection) and Mauritius Island (one collection).

* Numbers with an asterisk are derived from extrapolations made from **6 reports** filed before October 27th 2014, from more than **15 collections** organized in this area.

LITTER COLLECTED



435*

bags of litter were collected by the participants.

34.71 m³*

Total volume of litter collected

PEOPLE SENSITISED

1285*

people have been sensitised.
300* of them were schoolchildren, on the Indian Ocean.

AREA COVERED

21 500 m*

travelled by the participants, so 21,500 km.

TOP 5

In total, 2452 items were collected by our participants on 6 collections.
Top 5 most commonly found litter items during the quantification undertaken in the Indian Ocean area:

3252
CIGARETTE BUTTS

418
CLOTHES SHOES

330
PLASTIC BAGS and fragments of plastic bags

269
PACKAGES (wrappers...)

268
PLASTIC BOTTLES

TESTIMONIAL

YVON SERY (ADIPE), ST LEU BEACH, RÉUNION ISLAND

«The action was carried out during the 2014 sustainable development week. It was focused on the painstaking clean up of cigarette butts, over 70% were collected under the filao trees and close to rondavels (snack bars). Litter linked to tourism is omnipresent once again. It is mostly found after weekends, despite regular clean-up of marine litter by the local authorities.

The 24,000 cigarette butts gathered over 3 days really show that raising public awareness of litter pollution must remain a priority in society.»

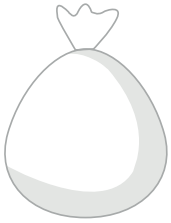
SOUTH ATLANTIC

Argentina, Brazil

45 % rate of return. The collections took place exclusively on beaches in Argentina (3 collections) and Brazil (2 collections).

* Numbers with an asterisk are derived from extrapolations made from **6 reports** filed before October 27th 2014, from more than **11 collections** organized in this area.

LITTER COLLECTED



484*

bags of litter were collected by the participants.

11.748 m³*

Total volume of litter collected

PEOPLE SENSITISED

1443*

people have been sensitised. **209*** of them were schoolchildren, on the South Atlantic zone.

AREA COVERED

7480 m*

travelled by the participants, so 7,480 km.

TOP 5

In total, 6017 items were collected by our participants during 5 collections.
Top 5 most commonly found items during the quantification undertaken in the South Atlantic area:

2000
CIGARETTE BUTTS

1030
NON-IDENTIFIABLE FRAGMENTS OF PLASTIC LITTER

555
TABLEWARE PICNIC/STRAWS

476
PACKAGES (wrappers...)

326
PLASTIC BAGS and fragments of plastic bags

TESTIMONIAL

ARIEL FIOCO SANTA TERESITA, ARGENTINA

«Beaches in the area covered by the action in cooperation with numerous educational institutions are less impacted than other beaches on the Argentinian coastline as there are fewer polluting industries.

However the same types of litter are found (cigarette butts, all kinds of plastic, metal, construction debris etc.). Unusual litter has also been collected: a butcher's saw, mobile phones, a computer screen, knives etc. A leatherback turtle (one of the major species of turtle in the area) was found during the action. It enabled us to better explain the impact of plastic debris on the oceans.»

03
BIOCARRIERS

Since 2010, Surfrider has noticed the presence of a great number of plastic wheels, called biocarriers, on the beaches and banks of streams in France. These biocarriers are used as bacterial support during the biological treatment phase of the collective and industrial waste water plants. The proliferation of these plastic washers in the marine environment and on the coastlines increases the amount of overall aquatic pollution. In order to fight against this specific source of plastic pollution, Surfrider conducts investigations with the aim of better understanding the process, identifying the producers and users, searching for the origins of this litter, and preventing in an effective manner the pollution of aquatic environments.

During the 2014 edition of Ocean Initiatives, 9,313 biocarriers were found on the beaches, lakes and rivers. The organizers of 28% of the collections recorded the presence of biocarriers in their area.

More than 90% of biocarriers reported by our organizers were found on the beaches of the Bay of Biscay and the Iberian Coast. However, it is in the Western Mediterranean that models 10 and 16 have been found in greatest number (76% and 83% respectively). This data tends to demonstrate that there were waste water treatment plant effluents linked to a dysfunction, which could explain their presence on the beaches of the French and Italian Mediterranean.

NUMBER OF BIOCARRIERS/100M BEACH

0.5	0.2	14.2	0.6	0.3
ADRIATIC SEA	CARIBBEAN AREA	BAY OF BISCAY AND IBERIAN COAST	WESTERN MEDITERRANEAN SEA	NORTH SEA CHANNEL

DETAIL OF THE BIOCARRIERS BY SHAPE

You can protest all year long and help us stop the dispersion of biocarriers in the environment.
http://www.gardiensdelacote.com/temoignage-medias-filtrants/

TYPE OF BIOCARRIER

SHAPE	Adriatic Sea	Bay of Biscay Iberian Coast	North Sea Channel	Western Mediterranean	Caribbean Sea	TOTAL
1.	10	874	141	7	0	1032
2.	10	1066	69	213	0	1358
3,	0	1637	25	1	0	1663
4,	0	2479	21	7	0	2507
5,	4	1101	3	5	10	1023
6,	0	6	1	0	0	7
7,	1	897	10	42	0	950
8,	0	33	2	0	0	35
9,	15	9	0	2	0	26
10,	0	31	0	103	0	135
11,	0	29	0	22	0	51
12,	0	199	9	5	0	213
13,	0	2	0	0	0	2
14,	0	107	0	53	0	160
15,	10	49	2	12	0	73
16,	4	9	0	65	0	78

04
FOCUS: RIVERINE INPUT

For the 19th edition of the Ocean Initiatives, the emphasis was placed on the importance of the link between upstream and downstream events in the proliferation of litter in the marine environment, with the campaign "If you drop it on the land, it ends up in the sea". The interest of Surfrider concerning the movement and dispersion of marine litter through the water cycle is not new and resulted, in 2013, in the creation of the project Riverine Input.

Although the rivers have been identified as an important introduction vector of litter from inside the land towards the marine environment, at the present moment, there is very little research on the quantity and the composition of litter originating inland and carried by the streams. One of the only known figures has been a major concern of ours: according to the UNEP, 80% of marine marine litter comes from land-based sources.

Taking these conclusions into account, we created a quantification and qualification protocol of transposable marine litter that can be applied on the scale of a watershed. The principle is to follow, evaluate and characterise the pollution of the watershed and the contribution of marine litter by the streams in the marine environment. The project, officially launched in October 2013, enabled the implementation of the protocol beginning February 2014 on the Adour watershed. At five control points monitored on a monthly basis we collected 30,000 pieces of litter, the majority being made of plastic. After 3 years of applying this protocol, the data accumulated has enabled conclusions to be drawn on the quantities and types of litter in the watershed.

Beyond this scientific aspect, the project has other scopes: educational, awareness-raising, legislative and in dialogue. The results that we will obtain are as important as the application of the protocol that, during the course of the project, enables us to involve citizens, associations, institutions, and businesses both upstream and downstream.

The data collected during the Ocean Initiatives will also be analysed in the framework of the Project Riverine Input. For more information: **http://riverineinput.surfrider.eu/.**

OCEAN INITIATIVES

Ocean Initiatives is a programme aimed at reducing marine litter at the source. Through local clean-up actions around rivers, lakes, oceans and the sea bed, Surfrider is targeting societal change. The data collected during these actions enables a general appraisal, enabling the adaptation of the European regulatory framework.

www.oceaninitiatives.org