

Marine Litter



**BE
THE
WAVE**

**MARINE
CONSERVATION
SOCIETY**



cadwch keep
gymru'n wales
daclus tidy



Lesson Objectives

- To discover the common types of litter found in the ocean
- To explain that litter has a social and economic impact on a community.
- To apply knowledge of the impact of marine litter to everyday life through #BeTheWave actions and Eco-Schools programme



What is marine litter?

What items do you see?

What material is the item made from?

How does it make you feel?

Why is it there?

















































What percentage of marine plastic litter is FLOATING in the ocean?

75%?

25%?

1%?



BEACHES

2,100kg/ km² (5% of total)

OCEAN SURFACE

18kg/ km²
(1% of total)*

SEA FLOOR

70kg/ km² (94% of total)

* concentration found in North Pacific gyre. Average concentration globally is <1kg per km²



Marine Litter - Types of Materials - Where in your community will you find these? How could these items be reduced?

PAPER

TEXTILES

GLASS

RUBBER

WOOD

METAL

CERAMICS

PLASTIC



Most marine litter is made from different plastic polymers

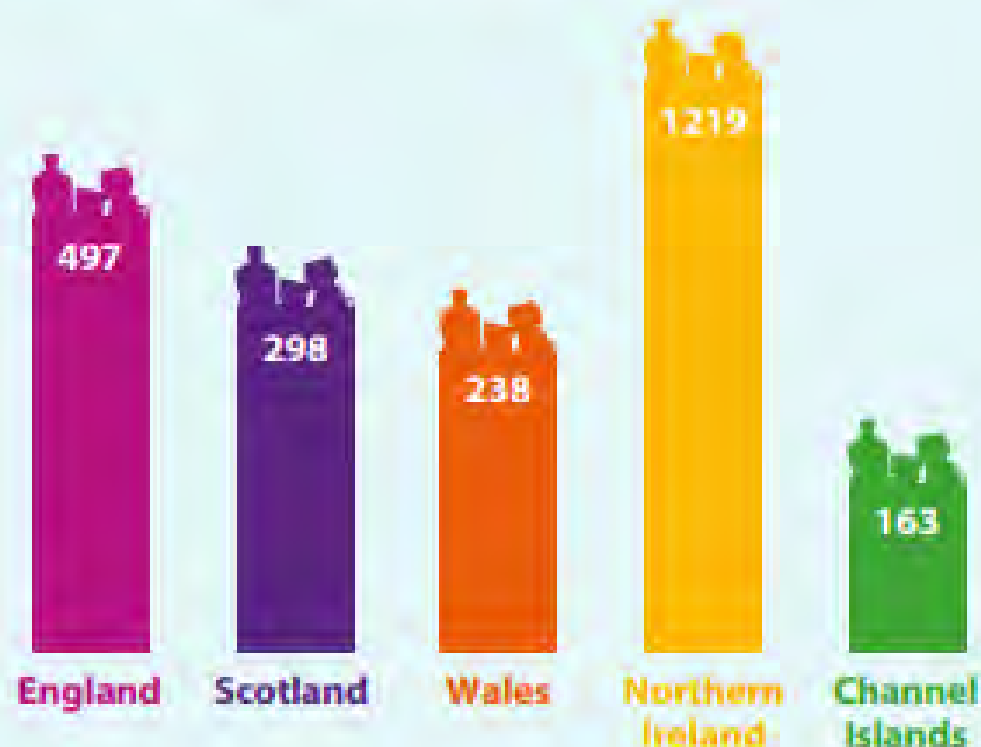


Great British BEACH CLEAN

2020 Report

How much litter did we find?

Average number of items by 100m



What were the materials?

73.7% Plastic/polystyrene

8.6% Sanitary items

5.1% Paper/cardboard

3.9% Glass

2.8% Metal

1.6% Cloth

1% Wood

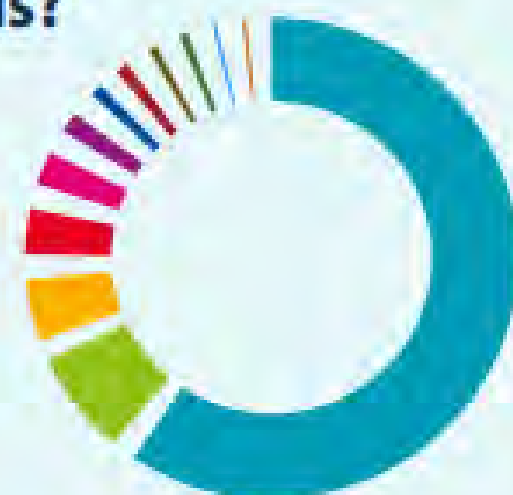
0.9% Rubber

0.8% Pollutant items

0.7% Pottery/ceramic

0.4% Dog faeces

0.3% Medical items



**The top five most common litter items on UK beaches in 2020
(average per 100m of beach surveyed):**

1. Plastic and polystyrene pieces (0-50cm) – 167.2
2. Plastic and polystyrene caps and lids – 19.7
3. Wet wipes – 17.7
4. Cigarette stubs – 16.2
5. Plastic string – 15.8



How did it get there?

[Barry Island: Litterbugs' 'complete disregard' for beach - BBC News](#)



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Barry Island: Litterbugs' 'complete disregard' for beach

8 May 2018



ROB AND CLAIRE CURTIS

Litter was strewn across Barry Island beach after the bank holiday sun

How long will it last?

Look at the list, how long do you think it will take each item to decompose?

Paper Towel	Plywood	Aluminium can
Newspaper	Cigarette butt	Plastic can holder
Cardboard box	Wool socks	Nappy
Apple core	Plastic bag	Plastic bottle
Waxed carton	Tin can	Fishing line
Cotton shirt	Styrofoam cup	Glass bottle

How long will it last?

How close was your estimation?



Long lasting litter – timeline

Timeline showing the estimated length of time it would take for different items of waste to break down in the sea.

Common waste found in the sea	Estimated length of time for waste item to break down
Paper towel	2-4 wks
Newspaper	6 wks
Cardboard box	2 months
Apple core	2 months
Waxed carton	3 months
Cotton shirt	6 months
Plywood	1-3 yrs
Cigarette butt	1-5 yrs
Wool socks	1-5 yrs
Plastic bag	10-20 yrs
Tin can	50 yrs
Styrofoam cup	50 yrs
Aluminium can	200 yrs
Plastic can holder	400 yrs
Nappy	450 yrs
Plastic bottle	450 yrs
Fishing line	600 yrs
Glass bottle	1 million yrs



Waxed carton
3 months

How long until it's gone?

The decomposition times of common marine debris



Plastic bag
10-20 years



Cardboard box
2 months



Cigarette butt
1-5 years



Fishing line
600 years



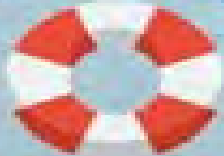
Apple core
2 months



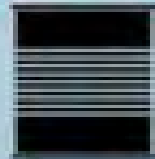
Wool socks
1-5 years



Glass bottle
Undetermined



Foam buoy
50 years



Tin can
50 years



Cotton shirt
2-5 months



Aluminum can
200 years



Paper towel
2-4 weeks



Plastic bottle
450 years



Newspaper
6 weeks



Plastic beverage
holder
50 years



Plywood
1-3 years



Styrofoam cup
50 years





Disposable Diaper
450 years

Create a series of social media posts highlighting how long litter found in school could stay in the marine environment



Scientists estimate that about one million species of animals live in the ocean.



We can take a stand and #BeTheWave of change

The human species is threatening this incredible ecosystem by overfishing and decimating huge areas of our ocean.

- Choose to only buy MSC certified fish
- Sign the Ocean Treaty to protect 30% of ocean space globally, allowing fish to safely breed and recover.

BE THE WAVE

AMAZING PLACES







#BeTheWave

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WAVE**



School

- What impact does your school have on local litter problems? Investigate, raise awareness and find solutions! Involve different subject areas to play a part e.g through music, drama or art.
- Invite environmental organisations and the local authority into your school to share information and highlight problems and positive actions.
- <https://www.sas.org.uk/take-action/> Stop Single Use Plastic and become a Plastic Free School

Individual

- Buy less! Consider your buying habits and make a pledge to consider swoping your single use items to a more sustainable alternative.
- Investigate the Generation Ocean campaign and it's youth and inclusion section. Join for regular information.
- Visit the Kids Against Plastic website, listen to the Plastic Clever TED talk and decide how you can become more plastic clever in your everyday lives and be inspired to do more!

