

Litter in the Environment

Sustainability Goals:





Subject links:

Science, Geography, Citizenship, ICT, Maths

Ages 7-11

Curriculum links:

Human impact, Topical issues, Fieldwork, Materials & properties, Environmental responsibility, Group work, Community, Digital skills, Statistics

Ocean Literacy Principles:

6. The ocean and humans are inextricably interconnected

Learning Objectives:

- To learn a basic survey technique to collect data and to evaluate the method
- · To analyse data and present it using IT
- · To consider the impact of litter on the natural world

Resources provided:

- Marine Litter Fact File
- Litter Survey worksheet
- Street Risk Assessment & River Risk Assessment
- Health & Safety Briefing Notes
- Beach litter through a child's eyes (video)
- MCS Great British Beach Clean (website)
- 2020 Beach Clean Results

Extra resources required

- Gloves
- Bin bags
- Litter pickers (if you have them)

Step 1

Background

Litter reaches the ocean in a number of ways: it's washed in from our rivers, is left on our beaches, or is cast overboard from boats. It not only makes the marine environment look unpleasant, but it impacts the health of thousands of marine animals every year, usually by ingestion, entanglement or suffocation. Plastic is the most commonly found material and it does not biodegrade, but breaks down into smaller and smaller pieces which can be mistaken for plankton or other food sources. More background info in the Fact File.

Litter surveys help us to understand the type of litter plaguing our environment. We can then use this information to raise awareness and campaign for change. Complete the *Plastic Plague* lesson as a way of revisiting materials and their properties.

Step 2

Set the Scene

10 minutes - What is marine litter?

Watch Beach litter through a child's

eyes to introduce the concept of litter picking and why it's needed. Pause during the text sections and discuss the statements as a class. After watching, discuss how litter might have travelled to the sea. Explain that 80% of litter comes from inland sources, so we need to collect litter from our local environment to prevent it from reaching the sea. Our From Source to Sea lesson details how litter reaches the sea.

Step 3

Activities

Activity 1: 1 hour - Litter picking

As a class, carry out a litter pick and survey in a safe area in your local community. The litter pick is a great way for students to practice survey techniques and to observe litter in the environment first-hand. To help you plan, we have provided *some health and safety guidance*. If you are unable to complete a litter pick, students could each bring in three waste items from home to analyse. You could then organise the items in an open space, using hoops to represent different categories.

For each litter item, students should work in small groups to complete the tables on the *Litter Survey* worksheet, recording the material, type of item, and whether or not it's recyclable (find recycling information in the *Fact File*). Discuss each table before going out on to the survey to ensure students understand the categories.

Activity 2:1 hour – Analysing the results

When you return from your litter pick, complete the second page of the Litter Survey worksheet. Use computers to present data from each table, then analyse your results and write a scientific report on what you found out. For inspiration, you could look at the Great British Beach Clean website and 2020 Beach Clean Results the to see how we present data collected on our cleans.

Compare your results against the top ten litter items and materails in the 2020 Beach Clean Results. Did you find similar items?

Step 4

Extend

15 minutes - Analysing the method

In small groups discuss how you could improve the survey technique. Are there more categories you could record data on? Are there other areas you could survey? Does your data represent the amount of litter in your whole community?

Step 5

Reflect

5 minutes

As a class, discuss students' thoughts and emotions when conducting the litter pick. Try not to ask too many closed questions but let the students guide the discussion around their emotions when experiencing litter in the environment.

Step 6

Follow up

Complete our *Plastic Challenge* lesson to consider how you could reduce the amount of litter being produced.

Complete our *Artivism* lesson to inspire students to create an art piece to raise awareness of marine litter.



It is estimated that 11 million tonnes of plastic ends up in the sea worldwide each year (1), and that 80% of litter found in the sea is from inland sources. (2)

Sources on land can include intentional and accidental littering, items flushed down toilets, sinks and drains, windblown litter from bins and landfills, and litter carried by rainwater into drains, rivers and eventually the sea. Litter is also a problem at sea, with sources like fishing, sailing, speed boats, commercial ships and container spills causing litter pollution.







Litter in the ocean takes longer to degrade than litter on land, but will eventually start to break up due to wave action, currents, saltwater and sunlight. Degradation time varies greatly from 1–450 years depending on the properties of the litter.

Microplastics are a serious environmental issue. They are plastics that have broken up into pieces less than 5mm, as well as pieces that enter the environment this size like microfibres or plastic nurdles, which are the small plastic pellets used in the production of plastic products.







Litter items can cause harm to all sorts of marine life, from tiny plankton to whales.

Animals can become entangled in litter, causing injury, reduced mobility and even death. Ingestion of litter, particularly plastic, is very problematic for marine life who are unable to digest it. Large amounts of plastic ingestion can lead to starvation, as there is no room left for food. One study found 100% of turtles to have plastic in their stomach. (3) In some areas, the extreme amount of plastic on the sea floor can suffocate the animals and plants living there.

Invasive species

Ocean currents can move plastics around the world. Small animals and plants can hitch a ride on the surface of plastic and travel with the currents, introducing non-native species to new areas. The introduction of non-native species could cause harm to the ecosystem.

Plastic chemicals

Several chemicals used in the production of plastic materials are carcinogenic. Toxic contaminants can also accumulate on the surface of plastic materials that have broken up and been underwater for a long time. When marine animals ingest plastic accidentally, these toxic contaminants enter their digestive systems and could build up in the food web over time.



Gannet carrying fishing rope.

© JHS Archer-Thomson



Microplastic pieces amongst seaweed. © Natasha Fwins





Litter surveys are not only important for clearing rubbish, but also for gathering data on the types of litter polluting our environment. Beachwatch is our national beach clean and survey initiative, and has been running for over 25 years. Our brilliant volunteers head out to beaches across the UK to clean and survey our coastline, collecting and recording the rubbish they find in a 100m stretch of beach. This litter data helps inform our campaigns and lobby government, and has led to influential changes like the UK-wide carrier bag charge, microbead bans and changes to wet wipe packaging.

We also use the data to determine the sources of litter. For example, if a significant amount of sewage-related debris (SRD) is found in an area, we work with local sewage treatment companies to try to improve treatment plants, and with communities to raise awareness of what should and shouldn't be flushed down the toilet.



We all need to do our bit to reduce litter in the environment. By rethinking how we shop and what we use in our daily lives, we can all make a difference. Refusing unnecessary plastic and other materials, reducing the amount of products we consume, and repairing rather than replacing are all important actions we can take. Through education, we can help raise awareness, encourage positive consumer behaviour, and campaign for change from businesses and the government.









Recycling

Even if we reduce the number of items we use, we will still need to throw some away. This is where efficient recycling is key. Download a guide from your local council to help students understand what can be recycled at home and at school. Many items can be recycled, but if your local council has limited recycling options check out Terracycle's website for local drop off points.

Plastics can only be recycled at best 2-3 times before they lose their strength, so we still need to move away from plastics to materials that can be recycled time and time again. We need to change how products are recycled, and how we incentivise best practice to ensure materials and resources are valued. This can include redesigning products or calling for economic incentives like Deposit Return Schemes (DRS), where a small deposit is paid when people buy a single-use drinks container and is refunded when they return it to a store or dedicated recycling point.



Circular Economy

We currently have an economy which is linear, which means we make, use and dispose of products using up finite resources. It's estimated that only 9% of all plastic ever made has been recycled, (4) so we know that recycling alone isn't the solution. Instead we need to move towards a circular economy, where products are designed to be used time and again, repairable, or re-designed into new products. The whole life cycle of the product has been considered so very little ends up in landfill.



Litter collected at a beach clean.
© Natasha Ewins



Single-use plastic straws. © Natasha Ewins



Litter Survey Worksheet

Household item

Other (specify):

Building/Construction

For each item you pick up record the type of (1) material, (2) type of item, and (3) whether it's recyclable or not by filling the in the three tables before putting the litter in the bin bag.

whether this material is biodegrae	dable or whether it last a long time.
Type of material	Tally
Plastic / Polystyrene	
Rubber	
Cloth	
Paper / Cardboard	
Wood	
Metal	
Glass	
Natural (e.g. banana peel)	
Other (specify):	
By recording the type of item we compaign to reduce litter.	can we think about where these items might have come from, this data could help decide a
Type litter item	Tally
Food and drink packaging	
PPE	

3	If you find lots of materials that could be recycled in your survey this might mean that education and information on recycling
	needs to be improved in your area.

Recyclable (tally)	Not recyclable (tally)	Unsure (tally)

Litter Survey Results

Now you completed the survey, fill out the boxes below to analyse your results (1) for material (2) types of items and (3) recycled items

(1) What was the most common material?	(2) How many individual items of litter did you find?	What was the most common type of item?	(3) Were most items recyclable/non recylable or unknown?

Name of item	What material is it?	Source?	Could it be recycled?	How could it harm wildlife?
e.g balloon, drinks can, newspaper	e.g. plastic, metal, paper	e.g. blown by wind, accidentally dropped, littered on purpose	Yes/ No/ Don't know	they could eat it, they could get trapped in it



Beachwatch Street Clean Risk Assessment

<u>IMPORTANT:</u> this risk assessment has been developed to include the most likely risks associated with the Street environment and the activity of Street Cleaning with your group. Due to the changing nature of this environment and variations between risks at different locations, you must adapt this document to suit the location of your event and make note of any additional risks present on the day. There are blank lines available to add risks specific to your event. You must sign to indicate that you have done this and keep a copy of this document. NEVER place yourself or others in the position of risk.

Street name:	Person responsible for calling emergency services (999 for Coastguard, Ambulance, Fire/Rescue, Police):
Risk Assessment completed by:	Time of Street Clean:
Date of Risk Assessment:	I confirm the Risk Assessment is accurate and has been updated as required: [tick box]

Essential for event and RA: First aid kit, container for glass, sharps box, hand sanitiser, strong gloves, (face mask if you would like to wear one)

Where is the nearest hospital: search here - https://www.nhs.uk/service-search/other-services/Accident-and-emergency-services/LocationSearch/428

Where is the nearest defibrillator: Search here - http://www.heartsafe.org.uk/aed-locations

Emergency Services: Call 999

Contact for dead/injured alive animals: phone RSPCA on 0300 1234999 (alive animals)

Who has the First Aid Kit/Is a First aider:

<u>Phone reception: Excellent / Good / Poor</u> (delete as appropriate) Check phone reception on arrival. Check with other adults and if no one has reception, identify the quickest route to a phone – may be a phone box nearby or go into a shop/cafe/kiosk and set up in advance just in case. This is an important stage of the risk assessment as the ability to contact emergency services is required to mitigate many of the identified risks.

Section 1 - Identify who might be at risk (please circle)

MCS Volunteers	Teachers/Group leaders	Young People	Parents/Helpers	Members of the public
Other (please state)				

Section 2 – Identify who is responsible for applying this risk assessment (please circle)

	T		
MCS Volunteer organiser	Teachers/Group leaders	Other (please state)	



Section 3 – Identify Hazards

1	Lack of understanding of the event site, or knowing what to do if something occurs.	7	Sharp or heavy litter	13	Safeguarding – special provisions for welcoming children and young people	
2	Transmission of coronavirus (Covid-19)	8	Hazardous waste (dog faeces, sewage, needles, Weil's Disease, containers)	14	Lone Working	
3	Lifting and carrying heavy items	9	Fly tipped waste	15		
4	Slips, Trips & Falls, including features of the environment (for example, steep banks rocks, mud, narrow paths)	10	Animals (dead), Aggressive dogs	16		
5	Roads	11	First aid required	17		
6	Weather conditions (Heat and Cold)	12	Member of the public becoming involved with the event	18		

Section 4 - Risk Controls

Hazard No.	Description of Hazard	Measures to manage the risk that the hazard could have. Ensure that you are satisfied that the measures effectively control the risk to the minimum possible level. Where risks cannot be reduced sufficiently, consider that the event cannot run	Who is responsible for implementing the controls, and when?
1	Lack of understanding of the event site, or knowing what to do if something occurs.	 Prior to the litter-pick taking place, Street Clean Organiser provides a briefing and safety talk, covering: risks and general information about correct use of the equipment the requirement to clean hands frequently with soap, or sanitiser particular features of the chosen area for cleaning (like traffic, banks, narrow paths etc) risks from hazardous waste and the need to avoid touching with hands/gloves who to contact if an accident occurs where and when to meet if the group becomes separated any issues that have become more hazardous (for example, due to the weather on the day, other events on the Street, increased traffic, overcrowding/ability to maintain social distancing etc). 	Street Clean Organiser in advance of the event and in the briefing on the day. Organiser can call the event to a close if behaviour is putting others at risk, or for any other hazards and risks that appear.



2	Transmission of coronavirus (Covid-19)	Street Clean Organiser Part of the H&S briefing				
		When volunteers start arriving at the event, they must be advised to maintain social distancing in line with government advice with anyone outside of their household.	at the start of the event.			
		Group advised to pay special attention to children and young adults who may find social distancing difficult to maintain.				
		Volunteers must be advised to bring along their own gloves, wear them at all times, and use litter pickers if they are available.				
		Any litter picking equipment given out to volunteers must be cleaned before and after use with a household disinfectant.				
		During the health and safety briefing, volunteers must be reminded not to touch their face during the clean and to regularly sanitise their gloves and hands.				
		All volunteers should wash their hands or use an appropriate hand sanitiser for 20 seconds at the end of the litter pick.				
3	Lifting and	Volunteers instructed not to over-fill bags or try to carry heavy items.	Street Clean Organiser			
	carrying heavy items	Volunteers advised to be aware of their own limitations by the event organiser during the briefing and not lift heavy items found during the clean up	informs as part of the H&S briefing at the start of the event.			
		Volunteers with pre-existing injuries are not to lift bags or heavy items	Street Clean Organiser			
		No more than one bag at a time to be carried	monitors during the			
		Young people are always supervised by a parent or guardian.	clean.			
	Only organisers/volunteers trained in safe manual handling procedures should offer guidance for safe lifting practices and reducing/removing common hazards and risks (reducing load weight, postural advice when lifting, handling asymmetrical loads, grip, other environmental factors, carry distance, obstacles en-route).		Street Clean Organiser to inform the Council for removal of waste			
		Volunteers advised on safe manual handling practices.				
		If too heavy to handle, leave the object in place and report it to the organiser to arrange removal by the council.				
4	Slips, Trips & Falls, including	Event organiser to choose a location with minimal hazard to the participants. Volunteers advised of any hazardous areas and informed that these are to be avoided.	Event organiser to include particular			
	features of the environment (for	Volunteers advised to wear supportive, slip resistant footwear and no open toed shoes.	features and cautions applicable to the			
	example, steep	Volunteers advised to take care when negotiating steps, on overgrown areas, rocky areas or wet/muddy ground.	cleaning site in the			
	banks rocks, mud.	Volunteers instructed to take extra care when carrying heavy bags and not carry them for long distances.	briefing and the conditions on the day.			



5	Narrow paths Roads	If in doubt, don't carry on if an area looks or becomes slippery or dangerous. Volunteers advised to stay away from steep banks and any visible landslips. Ensure children and young adults are supervised. Roads/streets are inherently difficult to manage the risks posed by traffic. Events to avoid very busy stretches and	Monitor activity during the event. Event organiser to cancel event if weather is sufficiently extreme. Street Clean Organiser
Ü		to have as good sight lines to view oncoming vehicles as can be made possible. Children to remain under supervision and in sight of a responsible adult at all times, preferably by a parent or guardian. All volunteers advised not to work on roads or roadside verges No litter picking near railway lines or bridges.	informs as part of the H&S briefing at the start of the event.
6	Weather conditions:	Street Clean Organiser to be aware of the predicted weather conditions in the lead up to the event and assess if the event can go ahead. Volunteers advised to dress appropriately for weather conditions. Gloves to be worn on all occasions.	Street Clean Organiser to assess the conditions on the day, and monitor
	Heat: Sunstroke, sunburn Dehydration, heat exhaustion Cold/Wind/Rain: Hypothermia	Volunteers advised to dress appropriately for weather conditions. Gloves to be worn on all occasions. Advise volunteers to take regular breaks and seek shade if necessary. Volunteers advised to wear sun hats and sun cream, re-apply as needed. Volunteers to have access to water and advised to drink plenty. Volunteers instructed to avoid areas where debris could come loose, i.e. trees, poorly maintained structures in high winds If lightning occurs, workers and volunteers are instructed to cease using litter pickers and stop the event Event Organiser to shorten the event duration due to the conditions or to end the event if the weather changes, or the location becomes unsafe.	during the event. Event organiser to cancel event if weather is sufficiently extreme
7	Sharp or heavy litter	Overall message is 'if in doubt, don't touch'. Volunteers advised to wear sturdy gardening type gloves at all times, to use a litter picker in preference to hands, and never pick handfuls of litter as broken glass and sharp items may be hidden inside. Glass and sharp items not to be put loose in a collecting bag. Collect glass in a separate container or bucket, and at the end of the clean, put into an appropriate recycling bin if one is available. Participants instructed to wrapped up securely, or in a sealable container which can be put in the waste bag at the end of the clean for safe removal. Bags not to be overfilled and made difficult to carry, Heavy or trapped items should be left and the Council informed to arrange collection.	Street Clean Organiser informs as part of the H&S briefing at the start of the event Street Clean Organiser to ensure a suitable container is provided for collecting sharp items.



8	Hazardous waste:	Streets can contain a variety of unpleasant and hazardous materials that can pose a risk to human health. Children should be supervised at all times and instructed to ask for help with hazardous waste. Street Clean Organiser emphasises the requirement to wear gloves and avoid contact with hazardous materials.	Street Clean Organiser informs as part of the H&S briefing at the start
	Dog faeces	Collect bagged dog faeces with litter pickers if possible or only with gloves on. Unbagged dog faeces should be left - clean footwear if waste is stepped in.	of the event Street Clean Organiser to contact Environment
	Sewage related	Sewage related items to be collected using litter pickers if possible – or only with gloves on.	Agency Pollution Hotline
	items Volume Suspicious ar containers	Volunteers instructed to never to approach suspicious looking containers with or without hazard warning sign and any suspicious drums, materials, barrels to be left untouched and Environment Agency Pollution Hotline to be contacted (Tel 0800 7312453), Scottish Environment Protection Agency (Tel 0800 80 70 60), Natural Resources Wales (Tel 0300 065 3000), Northern Ireland Environment Agency (Tel 0845 302 0008)	to be contacted (Tel 0800 7312453) Scottish Environment Protection Agency (Tel 0800 80 70
	Needles/medical waste	Volunteers finding syringes should not touch them, but immediately notify the event organiser. All work must then cease in this particular area until the syringe is recovered.	60), Natural Resources Wales (Tel 0300 065 3000), Northern Ireland
		Any accidental piercing by syringe should be immediately treated at a medical practice or A&E	Environment Agency (Tel 0845 302 0008) with
		Sharps are never to be put in collecting bags. Volunteers advised to alert organiser if sharps are found and if able, they will arrange proper disposal using sharps kit/by the council. https://www.gov.uk/report-syringes	any suspicious or hazardous containers
		Volunteers advised not to touch any potentially irritant and dangerous plants.	are found.
	Poisonous Plants	If unsure or concerned about presence of irritant and dangerous plants in the area, organiser to advise relevant authority, i.e. Local Authority.	
	Oil/Chemicals	Participants requested not to touch oil/tar/chemicals found but to report to event leader; if considered appropriate the relevant agency will be informed. (Agencies = Environment Agency (England); Natural Resources Wales; Scottish Environment Protection Agency; Northern Ireland Environment Agency).	
and keep then		Participants to pay particular attention to hand washing/using sanitiser to reduce the risk of infection. Wear gloves and keep them sanitised throughout the day. Cover all existing wounds on hands with dressings or Nitrile gloves under work gloves.	
	All volunteers should be advised to seek medical advice if they become ill in the weeks following the event and ensure they inform medical staff that they took part in a Street Clean.		
		Event Organiser to check with the Council/land owner about their particular approach to collecting used PPE pick when they are arranging for waste collection.	
9	Fly tipped waste	If there is an accumulation of waste which would obviously have been fly-tipped deliberately on site, then this should be left alone and the relevant local authority with responsibility for fly- tipping clearance informed.	Street Clean Organiser informs as part of the
		It is possible that asbestos could be found amongst smaller accumulations of litter that may not appear to be fly tipping. A simple asbestos ID chart can be found on the HSE website here: http://www.hse.gov.uk/asbestos/gallery.htm	H&S briefing at the start of the event.



10	Animals (dead)	Included in Health and safety briefing at start of event - dead animals are to be reported to relevant agency for removal.	Street Clean Organiser informs as part of the
		Participants instructed not to touch but immediately inform event leader (see Weil's Disease above).	H&S briefing at the start of the event
		Remain safe distance from animal.	
	Aggressive dogs	Volunteers advised of the threat of aggressive dogs and to not approach any unknown dog.	
	1.99.000.00	Dog Walkers in vicinity to be advised by group leader of the litter pick and to keep dogs under control	
		Children to remain under adult supervision and within sight of adults at all times	
		Adopt recommended posture if confronted by a dog – do not look in eyes, look down, do not run, pull limbs into body. Retreat slowly	
		Visit A&E if bitten or attacked	
		Report attack to the Police and refer to the government guidance on controlling dogs in pubic if you feel this is necessary: https://www.gov.uk/control-dog-public/report-a-dog	
11	First aid required	Street Clean Organisers advised to have a first aid kit available and to let participants know how to access it.	Street Clean Organiser informs as part of the H&S briefing at the start
		It is recommended that all clean-up hosts are First Aid trained	
		Event organiser to have mobile phone in case of emergency and call 999 if help is needed.	of the event
		Before each litter pick takes place, organiser updates and keeps a copy of details of local walk in centres and accident & emergency departments	
		Organiser to replace used first aid items immediately after event, check kit before every event and undertake formal inventory on a quarterly basis	
12	Member of the public becoming	Street Clean Organiser to monitor the event closely and ensure that they are known as the point of contact/discussion with any members of the public.	Street Clean Organiser informs as part of the
	involved with the event	Conflict can occur from groups of people socialising, playing in the streets, on footpaths.	H&S briefing at the start of the event
		Interested members of the public can be directed to the Beachwatch website to find suitable cleans to get involved with.	
		If a confrontation occurs move the group away and if it persists, contact the police.	
		We do not recommend that you approach members of the public to challenge inappropriate behaviour such as dog fouling or littering. If you do, please be polite and respectful.	
		Do not trespass onto private property whilst litter picking.	



13	Safeguarding – special provisions for welcoming children and young people at an event Lost child	The local community is a great environment for young people to enjoy, however, there are many distractions, and hazards that will need supervising at all times. Young people remain the duty of care of their parent or guardian at all times. Keep all young people in sight at all times – no wandering off to explore. Keep all young people away from the water. If you are a school or children's group leading a clean, be sure to work in small groups directly supervised by an adult helper. The size of group will depend on your particular group and location. On report of a missing child, the Street Clean Organiser must identify when they were last seen and where, if possible. If child is still not located after contacting other members of the group, a widespread search of the area should be conducted. If they are still not located, the police should be contacted on 999	Street Clean Organiser informs as part of the H&S briefing at the start of the event.
14	Lone Working	Let someone know where you are going to be and what time you should be back. Have a little check in, during the day if it's going to be a few hours. Consider location sharing on your phone.	Street Clean organiser

Put any additional risks that are relevant to the location and group of people attending

Hazard No.	Description of Hazard	Measures to manage the risk that the hazard could have. Ensure that you are satisfied that the measures effectively control the risk to the minimum possible. Where risks cannot be reduced sufficiently, consider that the event cannot run.	Who is responsible, and when?
15			
16			



17		
18		
18		
18		
18		
18		
18		



Beachwatch River Clean Risk Assessment

<u>IMPORTANT:</u> this risk assessment has been developed to include the most likely risks associated with the river environment and the activity of river cleaning with your group. Due to the changing nature of this environment and variations between risks at different locations, you must adapt this document to suit the location of your event and make note of any additional risks present on the day. There are blank lines available to add risks specific to your event. You must sign to indicate that you have done this and keep a copy of this document. NEVER place yourself or others in the position of risk.

River name:	Person responsible for calling emergency services (999 for Coastguard, Ambulance, Fire/Rescue, Police):
Risk Assessment completed by:	Time of River Clean:
Date of Risk Assessment:	I confirm the Risk Assessment is accurate and has been updated as required: [tick box]

Essential for event and RA: First aid kit, container for glass, sharps box, hand sanitiser, strong gloves, (face mask if you would like to wear one)

Where is the nearest hospital: search here - https://www.nhs.uk/service-search/other-services/Accident-and-emergency-services/LocationSearch/428

Where is the nearest defibrillator: Search here - http://www.heartsafe.org.uk/aed-locations

Coastguard & Emergency Services: Call 999

<u>Contact for dead/injured alive animals:</u> If you find a live marine mammal that is injured call BDMLR on 01825 765546. If you find any other live but injured animal call RSPCA on 0300 1234999.

Who has the First Aid Kit/Is a First aider:

<u>Phone reception: Excellent / Good / Poor</u> (delete as appropriate) Check phone reception on arrival. Check with other adults and if no one has reception, identify the quickest route to a phone – may be a phone box nearby or go into a shop/cafe/kiosk and set up in advance just in case. This is an important stage of the risk assessment as the ability to contact emergency services is required to mitigate many of the identified risks.

Section 1 - Identify who might be at risk (please circle)

MCS Volunteers	Teachers/Group leaders	Young People	Parents/Helpers	Members of the public
Other (please state)				

Section 2 – Identify who is responsible for applying this risk assessment (please circle)

MCS Volunteer organiser Teachers/Group leaders Other (please state)

Section 3 - Identify Hazards



1	Lack of understanding of the event site, or knowing what to do if something occurs.	8	Sharp or heavy litter	15	Safeguarding – special provisions for welcoming children and young people	
2	Transmission of coronavirus (Covid-19)	9	Hazardous waste (dog faeces, sewage, needles, Weil's Disease, containers)	16	Aggressive dogs	
3	Lifting and carrying heavy items	10	Fly tipped waste	17	Lone Working	
4	Tides/currents	11	Unexploded ordnance	18		
5	Slips, Trips & Falls, including features of the environment (for example, steep banks rocks, mud, locks, tunnels, narrow paths)	12	Animals (dead/alive);	19		
6	Roads and slipways	13	First aid required	20		
7	Weather conditions (Heat and Cold)	14	Member of the public becoming involved with the event	21		

Section 4 - Risk Controls

Hazard No.	Description of Hazard	Measures to manage the risk that the hazard could have. Ensure that you are satisfied that the measures effectively control the risk to the minimum possible level. Where risks cannot be reduced sufficiently, consider that the event cannot run	Who is responsible for implementing the controls, and when?
1	Lack of understanding of the event site, or knowing what to do if something occurs.	 Prior to the litter-pick taking place, River Clean Organiser provides a briefing and safety talk, covering: risks and general information about correct use of the equipment the requirement to clean hands frequently with soap, or sanitiser particular features of the chosen area for cleaning (like banks, narrow paths etc) risks from hazardous waste and the need to avoid touching with hands/gloves who to contact if an accident occurs where and when to meet if the group becomes separated 	River Clean Organiser in advance of the event and in the briefing on the day. Organiser can call the event to a close if behaviour is putting others at risk, or for any other hazards and risks that appear



		any issues that have become more hazardous (for example, due to the weather on the day, other events on the river, increased traffic, overcrowding/ability to maintain social distancing etc).	
2 Transmission of coronavirus (Covid-19)		All volunteers are advised not to attend any event if they have coronavirus symptoms. Pre-event communications with volunteers must include a clear message that they must not attend if they or any member of their household have symptoms of the coronavirus. They should also not attend if they, or any member of their household is shielding or classed as clinically/extremely vulnerable.	River Clean Organiser Part of the H&S briefing
		When volunteers start arriving at the event, they must be advised to maintain social distancing in line with government advice with anyone outside of their household.	at the start of the event.
		Group advised to pay special attention to children and young adults who may find social distancing difficult to maintain.	
		Volunteers must be advised to bring along their own gloves, wear them at all times, and use litter pickers if they are available.	
		Any litter picking equipment given out to volunteers must be cleaned before and after use with a household disinfectant.	
		During the health and safety briefing, volunteers must be reminded not to touch their face during the clean and to regularly sanitise their gloves and hands.	
		All volunteers should wash their hands or use an appropriate hand sanitiser for 20 seconds at the end of the litter pick.	
3	Lifting and carrying	Volunteers instructed not to over-fill bags or try to carry heavy items.	River Clean Organiser
	heavy items	Volunteers advised to be aware of their own limitations by the event organiser during the briefing and not lift heavy items found during the clean up	informs as part of the H&S briefing at the start of the event.
		Volunteers with pre-existing injuries are not to lift bags or heavy items	River Clean Organiser
		No more than one bag at a time to be carried	monitors during the clean.
		Young people are always supervised by a parent or guardian.	
		Only organisers/volunteers trained in safe manual handling procedures should offer guidance for safe lifting practices and reducing/removing common hazards and risks (reducing load weight, postural advice when lifting, handling asymmetrical loads, grip, other environmental factors, carry distance, obstacles en-route).	River Clean Organiser to inform the Council/Beach Owner for removal of waste
		Volunteers advised on safe manual handling practices.	



4	Tides/currents	If too heavy to handle, leave the object in place and report it to the organiser to arrange removal by the council. If on a foreshore then the tide times will be checked, and timing of event planned to ensure the sea will not be too close to participants. Volunteers advised to stay away from water's edge, not to enter the water Volunteers advised of tidal times and not to go to areas of the foreshore that could be cut-off. Special consideration of risks from the water for young people in the group – to be supervised at all times.	River Clean Organiser informs as part of the H&S briefing at the start of the event. River Clean Organiser monitors and cancels event if water conditions threaten volunteer safety.
5	Slips, Trips & Falls, including features of the environment (for example, steep banks rocks, mud. Locks Tunnels Narrow paths	Event organiser to choose a location with minimal hazard to the participants. Volunteers advised of any hazardous areas and informed that these are to be avoided. Volunteers advised to wear supportive, slip resistant footwear and no open toed shoes. Volunteers advised to take care when negotiating steps, on overgrown areas, rocky areas or wet/muddy ground. Volunteers instructed to take extra care when carrying heavy bags and not carry them for long distances. If in doubt, don't carry on if an area looks or becomes slippery or dangerous. Volunteers advised to stay away from steep banks and any visible landslips. Ensure children and young adults are supervised, particularly at locks where there is a risk of falling in. Note if buoyancy aids/life rings are available in the area of your route - choose locations that have them where possible. If someone falls in Call 999. Shout that help is on its way. Encourage them to float on their back. If being carried with water flow try to stay ahead of them. Use a life ring or a long branch if possible and safe to do so, and doesn't put you at risk of falling in.	Event organiser to include particular features and cautions applicable to the cleaning site in the briefing and the conditions on the day. Monitor activity during the event. Event organiser to cancel event if weather is sufficiently extreme.
6	Roads	Prior to event, organiser to advise participants of any requirement to cross roads	River Clean Organiser informs as part of the



		Children to remain under supervision and in sight of a responsible adult at all times, preferably by a parent or guardian.	H&S briefing at the start of the event.
		All volunteers advised not to work on roads or roadside verges	
		No litter picking near railway lines or bridges.	
7	Weather conditions: Heat:	River Clean Organiser to be aware of the predicted weather conditions in the lead up to the event and assess if the event can go ahead.	River Clean Organiser to assess the conditions on
	Sunstroke, sunburn	Volunteers advised to dress appropriately for weather conditions. Gloves to be worn on all occasions.	the day, and monitor during the event.
	Dehydration, heat	Advise volunteers to take regular breaks and seek shade if necessary.	Event organiser to
	exhaustion	Volunteers advised to wear sun hats and sun cream, re-apply as needed.	cancel event if weather
	Cold/Wind/Rain:	Volunteers to have access to water and advised to drink plenty.	is sufficiently extreme
	Hypothermia	Volunteers instructed to avoid areas where debris could come loose, i.e. trees, poorly maintained structures in high winds	
		If lightning occurs, workers and volunteers are instructed to cease using litter pickers and stop the event	
		Event Organiser to shorten the event duration due to the conditions or to end the event if the weather changes, or the location becomes unsafe.	
8	Sharp or heavy litter	Overall message is 'if in doubt, don't touch'.	River Clean Organiser
		Volunteers advised to wear sturdy gardening type gloves at all times, to use a litter picker in preference to hands, and never pick handfuls of litter as broken glass and sharp items may be hidden inside.	informs as part of the H&S briefing at the start of the event
		Glass and sharp items not to be put loose in a collecting bag. Collect glass in a separate container or bucket, and at the end of the clean, put into an appropriate recycling bin if one is available. Participants instructed to wrapped up securely, or in a sealable container which can be put in the waste bag at the end of the clean for safe removal.	River Clean Organiser to ensure a suitable container is provided for collecting sharp items.
		Bags not to be overfilled and made difficult to carry,	
		Heavy or partially buried items should be left and the land owner informed to arrange collection.	
9	Hazardous waste:	Rivers can contain a variety of unpleasant and hazardous materials that can pose a risk to human health. Children should be supervised at all times and instructed to ask for help with hazardous waste.	River Clean Organiser informs as part of the
	Dog faeces	River Clean Organiser emphasises the requirement to wear gloves and avoid contact with hazardous materials.	H&S briefing at the start of the event
	Sewage related items	Collect bagged dog faeces with litter pickers if possible or only with gloves on. Unbagged dog faeces should be left - clean footwear if waste is stepped in.	River Clean Organiser to contact Environment Agency Pollution Hotline



	Suspicious containers	Sewage related items to be collected using litter pickers if possible – or only with gloves on.	to be contacted (Tel
	Needles/medical waste	Volunteers instructed to never to approach suspicious looking containers with or without hazard warning sign and any suspicious drums, materials, barrels to be left untouched and Environment Agency Pollution Hotline to be contacted (Tel 0800 7312453), Scottish Environment Protection Agency (Tel 0800 80 70 60), Natural Resources Wales (Tel 0300 065 3000), Northern Ireland Environment Agency (Tel 0845 302 0008)	0800 7312453) Scottish Environment Protection Agency (Tel 0800 80 70 60), Natural Resources Wales (Tel 0300 065 3000), Northern Ireland Environment Agency (Tel 0845 302 0008) with any suspicious or hazardous containers are found.
	Weil's Disease	Volunteers finding syringes should not touch them, but immediately notify the event organiser. All work must then cease in this particular area until the syringe is recovered.	
		Any accidental piercing by syringe should be immediately treated at a medical practice or A&E	
		Sharps are never to be put in collecting bags. Volunteers advised to alert organiser if sharps are found and if able, they will arrange proper disposal using sharps kit/by the council. https://www.gov.uk/report-syringes	
		The risk of Weil's disease will be outlined in the H&S briefing at the start of the event. Volunteers must keep hands/gloves clean, use clean water to rinse if available, wash hands or use sanitiser. Ensure that all volunteers have cuts and grazes covered and all must be wearing gloves.	
		Participants requested not to touch oil/tar/chemicals found but to report to event leader; if considered appropriate the relevant agency will be informed. (Agencies = Environment Agency (England); Natural Resources Wales; Scottish Environment Protection Agency; Northern Ireland Environment Agency).	
		Participants to pay particular attention to hand washing/using sanitiser to reduce the risk of infection. Wear gloves and keep them sanitised throughout the day. Cover all existing wounds on hands with dressings or Nitrile gloves under work gloves.	
		All volunteers should be advised to seek medical advice if they become ill in the weeks following the event and to ensure they inform medical staff that they took part in a river clean.	
		Event Organiser to check with the Council/land owner about their particular approach to collecting used PPE pick when they are arranging for waste collection.	
10	Fly tipped waste	If there is an accumulation of waste which would obviously have been fly-tipped deliberately on site, then this should be left alone and the relevant local authority with responsibility for fly- tipping clearance informed.	River Clean Organiser informs as part of the H&S briefing at the start
		It is possible that asbestos could be found amongst smaller accumulations of litter that may not appear to be fly tipping. A simple asbestos ID chart can be found on the HSE website here: http://www.hse.gov.uk/asbestos/gallery.htm	of the event.
11	Unexploded ordnance	Health and safety briefing at the start of the event will highlight the hazard of unexploded ordnances. Participants advised not to touch and/or approach suspected unexploded ordnance, but to immediately inform the event leader.	River Clean Organiser informs as part of the H&S briefing at the start of the event



		Event leader to stop all activity and participants moved a safe distance away from the unexploded ordnance.	
		Event leader to immediately notify Emergency Services/999 and establish a safe cordon around the device.	
12	Animals (dead/alive)	Included in Health and safety briefing at start of event - dead animals are to be reported to relevant agency for removal.	River clean Organiser informs as part of the H&S briefing at the start of the event
		Participants instructed not to touch but immediately inform event leader (see Weil's Disease above).	
		Remain safe distance from animal.	00 0.0
13	First aid required	River Clean Organisers advised to have a first aid kit available and to let participants know how to access it.	River clean Organiser informs as part of the H&S briefing at the start of the event
		It is recommended that all clean-up hosts are First Aid trained	
		Event organiser to have mobile phone in case of emergency and call 999 if help is needed.	
		Before each litter pick takes place, organiser updates and keeps a copy of details of local walk in centres and accident & emergency departments	
		Organiser to replace used first aid items immediately after event, check kit before every event and undertake formal inventory on a quarterly basis	
14	Member of the public becoming involved with the event	River clean Organiser to monitor the event closely and ensure that they are known as the point of contact/discussion with any members of the public.	River clean Organiser informs as part of the H&S briefing at the start of the event
		Conflict can occur with recreational or competition anglers, moored boats, groups of people socialising/picnicking.	
		Interested members of the public can be directed to the Beachwatch website to find suitable cleans to get involved with.	
		If a confrontation occurs move the group away and if it persists, contact the police.	
		We do not recommend that you approach members of the public to challenge inappropriate behaviour such as dog fouling or littering. If you do, please be polite and respectful.	
		Do not trespass onto private property whilst litter picking.	
15	Safeguarding – special provisions for welcoming children and young people at an event Lost child	Rivers are great environments for young people to enjoy, however, there are many distractions, and hazards that will need supervising at all times.	River clean Organiser informs as part of the
		Young people remain the duty of care of their parent or guardian at all times.	H&S briefing at the start of the event.
		Keep all young people in sight at all times – no wandering off to explore.	
		Keep all young people away from the water.	



		If you are a school or children's group leading a clean, be sure to work in small groups directly supervised by an adult helper. The size of group will depend on your particular group and location. On report of a missing child, the River clean Organiser must identify when they were last seen and where, if possible. If child is still not located after contacting other members of the group, a widespread search of the river bank should be conducted. If they are still not located, the police should be contacted on 999	
16	Aggressive dogs	Volunteers advised of the threat of aggressive dogs and to not approach any unknown dog. Dog Walkers in vicinity to be advised by group leader of the litter pick and to keep dogs under control Children to remain under adult supervision and within sight of adults at all times Adopt recommended posture if confronted by a dog – do not look in eyes, look down, do not run, pull limbs into body. Retreat slowly Visit A&E if bitten or attacked Report attack to the Police and refer to the government guidance on controlling dogs in pubic if you feel this is necessary: https://www.gov.uk/control-dog-public/report-a-dog	River clean Organiser informs as part of the H&S briefing at the start of the event.
17	Lone Working	Let someone know where you are going to be and what time they should be back. Have a little check in, during the day if it's going to be a few hours. Consider location sharing on your phone.	River Clean Organiser

Put any additional risks that are relevant to the location and group of people attending

Hazard	Description of	Measures to manage the risk that the hazard could have. Ensure that you are satisfied that the measures effectively control the risk to the minimum possible. Where risks cannot be reduced sufficiently, consider that the event cannot run.	Who is responsible,
No.	Hazard		and when?
18			



19		
20		
21		

SOURCE TO SEA BRIEFING SHEET FOR VOLUNTEERS



Updated - 13/08/2020

INTRODUCTIONS

Hello, my name is [xxxx]. Thank-you for coming to take part in the Source to Sea Litter Quest! Before we get started today, I need to run through a few things.

This event is part of the Marine Conservation Society's Great British Beach Clean, which is their flagship event, now in its 27th year. The Great British Beach Clean is more than just litter picking - people become citizen scientists and carry out a litter survey, recording what they find on the beaches to help show a national and international picture of the most common forms of litter. The Marine Conservation Society uses this data to call for policy change, tackling ocean pollution at its source.

Illustrating the impact of inland litter on beach pollution, the Marine Conservation Society's Source to Sea Litter Quest highlights the most common beach litter and asks volunteers to spot them (and pick them up!) in their local area. The plastic bottles, drink cans and face masks spotted in the UK's parks and streets will ultimately end up on the beach. 80% of the pollution on beaches around the UK is from litter which has travelled from our towns, parks and rivers.



HEALTH AND SAFETY BITS

It's important we all keep safe when litter picking so here are a few things to note for health and safety.

With the coronavirus outbreak please make sure you keep to social distancing guidelines with anyone not in your household. You must all be wearing strong sturdy gloves, remember to not touch your face during the clean and don't forget to wash your hands with soap for 20 seconds after the clean or use a hand sanitizer until you can get to soap and water.

Please don't touch anything that looks like it might be dangerous or full of something nasty (containers, drums, unexploded shells or syringes). If you're unsure, ask me. Be careful about lifting heavy or semi-buried objects that could cause a strain injury - if in doubt don't lift!

Sharp items must not go in bin bags as they can rip the bags and cut your legs. Syringes go in a yellow sharps box (if one is available. If you do not have one then please leave the needle/syringe there and inform the land owner.) All other sharp items like broken glass go in this container which I will carry [e.g. a bucket, milk bottle with the top cut off etc].

If you cannot socially distance whilst on your litter pick, please stop litter picking and, if required, we will all move away from the overcrowded location.

All pets must be on a lead where required and on narrow footpaths.

[If you are by a river] Please keep away from the water's edge. Young people/children should be supervised at all times.

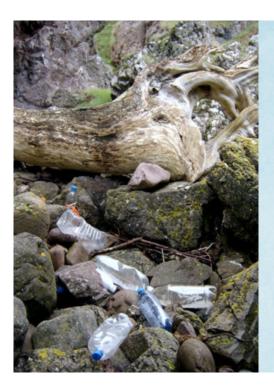
Weil's disease is a form of a bacterial infection. It can be caught by humans through contact with rat or cattle urine, most commonly occurring through contaminated fresh water. It is important that you keep away from the water's edge.

Volunteers must keep hands/gloves clean, use clean water to rinse if available, wash hands or use sanitiser. Ensure that all existing cuts and grazes are covered and keep your gloves on when on the litter pick.

If you become ill in the weeks following the event you are advised to seek medical advice and inform medical staff that you took part in a river clean.

If anyone accidentally falls in then do not jump in to help. If you have fallen in then swim to side if possible or if not, lay on your back with the current. I will call 999 for urgent help

I have undertaken a risk assessment and I'd like to point out the following hazards that need to be noted today [refer to risk assessment].



THE LITTER PICK ITSELF

During the litter pick we want to identify any key items that the Marine Conservation Society also find on our beaches. The items are:

Glass bottles
Metal drink can
Plastic drink bottles and tops
Plastic drink cups
Polystyrene cups
Plastic bag for life
Single-use plastic bag
Polystyrene fast food container
Single-use plastic gloves
Single-use face mask
Balloons

Please let me know if you find any and I can mark it down on the Source to Sea Litter Quest.

POST CLEAN DEBRIEF

- Weigh your bags of litter [if you have weighing scale]
- Who got most / weirdest items

Ensure you wash your hands with soap for 20 seconds after the clean or use a hand sanitizer.

Key messages:

- This is a great time to talk about the importance of litter picks to gather information once it's in our environment it's too late. We want to stop it from ever getting into the sea, and that's why we collect the litter data.
- Also mention what people can do in their day-to-day lives from reducing their single-use plastic, from plastic bottle, bags, coffee cups and straws to choosing loose fruit and veg where they can. They can also check out our website and sign up to our e-news to keep to-to-date on all our campaigns and how they can get involved.

Great British BEACH CLEAD

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 0.8% Pollutant items

1.6% Cloth 0.7% Pottery/ceramic

1% Wood 0.4% Dog faeces

0.9% Rubber 0.3% Medical items

How many volunteers took part?



1153



396







59

How many beaches were cleaned?



Where did it come from?



51.9% Non-sourced

Hard to know where it's from - mainly because it's too tiny to identify



Litter that the public has not disposed of correctly - usually left on beaches, blown in off the street, or carried by waterways



8.9% Fishing

All the things from lobster pots to fishing nets, that help anglers and commercial fishermen catch seafood



8.6% SRD

Sanitary products and other household items that are flushed down the loo but should go in the bin



2% Shipping

Objects lost, or thrown overboard from small craft or massive ships



📺 0.6% Fly-tipped

Illegally dumped items like TVs, mattresses and tyres



0.3% Medical

Pill packets to syringes.

What did we find?





7.1 /100m