



# COASTWATCH EUROPE SHORE SURVEY 2020

Sept 15th to Oct 15th

5 step SUMMARY: more detail in GUIDE NOTES on [www.coastwatch.org](http://www.coastwatch.org)

## 1. FIND AND BOOK YOUR SURVEY AREA - 2 options to do that:

### OPTION 1: DIY - all on line

Go to [www.coastwatch.org](http://www.coastwatch.org) and follow survey [booking instructions](#) with [map](#) to choose your 500m survey unit(s). Copy the unique code that pops up when you click on a s.u. on the map into the survey form question A1. Take a photo or screen shot of the map with code.

### OPTION 2: Contact Coastwatch

Contact Coastwatch regional or national coordination – (see bottom of page) to help you find a suitable area to book. Indicate if you are a new volunteer, want to join others, &/or do training.

## 2. MATERIALS CHECK LIST before going out to do your fieldwork:

1. Shore Survey form, 1 per 500m survey unit (s.u.)
2. Map: screenshot on phone, printed or sketch.
3. Guide Notes & species ID poster (on paper or phone)
4. Biros (2 colours to facilitate a 2nd survey)
5. Phone (if smart phone see planning below)

### OPTIONAL/WHERE RELEVANT

**Nitrate test kits** for freshwater inflow testing (request from coordinator)


**Phone apps:** Micro Litter App, River Obstacle and Eyeonwater

**Useful:** A bag with camera, clip board, hankies, hair tie, raingear, container like Greek yogurt bucket with lid for special finds or sample. Thermometer &/or pH sticks for more inflow data.

## 3. PLAN YOUR SURVEY

- Plan survey to start an hour before low tide. Use a tide table or Google: **Low tide at** (nearby town) or check [www.bit.do/easytide](http://www.bit.do/easytide)
- Print online survey form or get a hard copy from Coastwatch coordinator and download guide notes and ID posters to your phone.
- Take the map of the survey area (photographed in step 1 or printed screenshot for viewing on your phone when out).
- Allow enough time ~ 30 min. for a simple straight dune site or promenade, an hour for a complex shore with streams.

## 4. SURVEY

- Complete the survey form while checking the shore from edge of hinterland to low water. Use apps where relevant if you can.
- NB - Note the tide on arrival and if it is starting to come in, start at low water – especially with extra biodiversity questions.
-  Take pictures of key findings and if concerned or immediate action is needed, call Coastwatch coordination or relevant authority.

## 5. BACK HOME

- Input your results online while its fresh in your mind by going to [www.coastwatch.org/europe/survey/](http://www.coastwatch.org/europe/survey/) or post your survey forms.
- If you used our micro litter or other apps and wanted to avoid using up data, go to a Wi-Fi hotspot and send your results now.
- You can submit pictures on [coastwatch.org/europe/send-your-pictures/](http://coastwatch.org/europe/send-your-pictures/) or by emailing them to [survey@coastwatch.org](mailto:survey@coastwatch.org).
- If you want to post query material or photos on CD: **Coastwatch, Civil & Env. Engineering, TCD, Dublin 2. Ireland.**

### HEALTH AND SAFETY + COVID notes

- Check your country's/area's latest COVID rules to help you plan safely.
- Check the weather to avoid storms, high waves and heavy swells.
- Wear suitable boots/water shoes; bring raingear & layers of clothes.
- Survey where it's safe. Avoid walking over wet rocks and onto soft mud (most inner estuary sites) where you could sink or get cut off.

### SHORTCUTS

- Complete most of page 1 before going out.
- Share questions (e.g. counts) between surveyors.
- Do two adjacent survey sites on 1 form. Use two different colour biros on the one questionnaire (1/survey unit) to save paper and time.

**Contacts/Queries: Regional coordinators are listed on:** [www.coastwatch.org](http://www.coastwatch.org)

Coastwatch General: COVID remote work + Trinity College Dublin: [survey@coastwatch.org](mailto:survey@coastwatch.org)

International and urgent **Karin Dubsy** 00 353 (0)86 8111 684 and [kdubsky@tcd.ie](mailto:kdubsky@tcd.ie)

Mapping/Data Handling Queries: **Ángel Duarte Campos** [survey@coastwatch.org](mailto:survey@coastwatch.org)

THIS SURVEY FORM IS ORGANISED IN THEMATIC SECTIONS

Section	Covering	Page
A	Surveyors, Area Designation & Access to the Shore	1
B	Hinterland, Inflows (water draining from land) and Sewage Pollution	2
C, D	Splash zone, Intertidal, Animals and Plants	3
E	Litter and micro litter (+ litter app option) Oil and Tar	4
F	Overall shore looks, shore cleaning, Notes and Threats	6
Extra: Biodiversity & Use	Biodiversity and shore use specific for your country or region	7
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**A Background information** on the 500 m survey unit & surveyor(s)

**A1** Country code    County code    Block code    Unit code

[www.coastwatch.org/europe/map](http://www.coastwatch.org/europe/map)



**Scan me**  
with your phone  
to see the  
Coastwatch map

**A2 Name of survey unit or area**

Map name     Local name if different &/or landmark

**A3 Name and address of surveyor(s)/school/group**

Name (Please write **very** clearly!)

Address (Please give your address, phone and email only if you agree to be contacted by Coastwatch)

Telephone     Email

**A4 Date of survey**

Day     Month     Year

**For your privacy:**  
Would you like to be named as surveyor and results contributor?  
 Yes     No

**A5 How well do you know this site?**

Well     A little     Here on 1<sup>st</sup> or 2<sup>nd</sup> visit

**A6 From present knowledge - is this unit (or part of) an officially designated area?**

Yes     No     Don't know

**A7 If yes, tick which nature &/or human use designations/permits apply:**

<input type="checkbox"/> (UNESCO) Biosphere Reserve	<input type="checkbox"/> 'Bathing Water'
<input type="checkbox"/> RAMSAR Site	<input type="checkbox"/> 'Shellfish Production Area'
<input type="checkbox"/> Natura 2000 site (SPA, cSAC or SAC)	<input type="checkbox"/> Access for vehicles (on shore parking, route to fields)
<input type="checkbox"/> National Park	<input type="checkbox"/> Other use right or designation (seaweed harvest, boat slip)
<input type="checkbox"/> Other Nature designation.....	.....

**A8 Is there public access to your coastal unit from land down to high water?**

by vehicle    Also please tick if:  Access is marked private or prohibited.

by foot     Partially inaccessible.

by wheelchair     Inaccessible. Your report ends here, or note how you overcame the access problem

Any comment questions A 7 or 8

.....  
.....



# B Land and Inflows

**B1** What is the immediate hinterland (first 500 m) mainly devoted to? (Tick up to 5 boxes)

- |   |  |
|---|--|
| <input type="checkbox"/> <b>Farmland:</b> Intensive grazing     | <input type="checkbox"/> Village or town residential   |
| <input type="checkbox"/> <b>Farmland:</b> Tillage, horticulture | <input type="checkbox"/> Tourist resort  |
| <input type="checkbox"/> <b>Farmland:</b> Rough grazing         | <input type="checkbox"/> Waste tip/dump (official and unofficial)  |
| <input type="checkbox"/> Park, woodland, forest                 | <input type="checkbox"/> Industry, commercial area, or power station   |
| <input type="checkbox"/> Dunes                                  | <input type="checkbox"/> <b>Transport</b> → tick: <input type="checkbox"/> road <input type="checkbox"/> train <input type="checkbox"/> carpark <input type="checkbox"/> harbour |
| <input type="checkbox"/> Wetland (bog, marsh, lagoon)           | <input type="checkbox"/> Construction site   |
| <input type="checkbox"/> Rock or other bare natural sediment    | <input type="checkbox"/> <b>Other:</b> please state: (e.g. golf course) .....  |

NB - Extra Coastwatch harbour Qs available

**B2** Please count all inflows into your s.u. as you walk. Give details of up to 4 inflows in the order encountered. If there are more than 4, choose the most important in terms of potential pollution impact.

Information on inflows as encountered - or important ones:	Inflow 1	Inflow 2	Inflow 3	Inflow 4
<b>Type:</b> 'P' for Pipe, 'S' for Seepage, 'D' for Drain, storm drain or irrigation canal, 'R' for River, stream. Add name for R if known.				
Inflow Size: S (Small), M (Medium) or L (Large)				
✓ <b>if found</b>				
<b>Animal life in/on water (and add F if you see live Fish)</b>				
<b>A bad smell from the inflow</b>				
<b>Discolour/scum/froth</b>				
<b>Dead Fish</b> - if yes, please add a count/estimate and photograph				
<b>General Waste/litter</b> dumped or washed down				
<b>Sanitary litter &amp;/or visible sewage</b>				
<b>Filamentous algae &amp;/or sewage fungus.</b> Add <b>B</b> if it's a blanket layer				
<b>Oil, petrol or diesel</b>				
<b>Invasive Alien Species.</b> Note <b>'W'</b> if in water or <b>'B'</b> on inflow banks (see Coastwatch IAS poster for some species)				



**If you have access to any test kits, please test inflow in the fresh water zone and record results here:**


Inflow water:	Inflow 1	Inflow 2	Inflow 3	Inflow 4
Did you detect <b>Nitrite</b> (NO <sub>2</sub> )? If tested, please circle + yes or - no.	+ or -	+ or -	+ or -	+ or -
<b>Nitrate</b> (mg/l NO <sub>3</sub> ) levels (read result 1 min. after dip test).				
Inflow Water <b>temperature</b> (please use your own thermometer).				
How acidic or basic is the water? The <b>pH</b> is:				

The Total Number of Inflows counted in the survey unit was:   
(Include intermittently active inflows like storm drains)

**B3** If you know the survey unit well, **please estimate frequency of sewage pollution incidents** (This is focussing on water of your survey unit. Think of advice if a visitor was to swim or eat shellfish here)


- Never     Rare     Occasional     Frequent     Usual     Seasonal

Notes on B2 & B3: .....

 **C SPLASH ZONE** (The shoreline from mean high water up to land - spring high watermark)

**C1 Indicate the approximate width of splash zone.** (Tick several widths if area is not uniform)  
 0-1m     1-5m     5-50m     50-250m     > 250m (estimate with big steps)

**C2 What did you find in your splash zone?** (Tick up to five boxes)

<input type="checkbox"/> Salt Marsh	<input type="checkbox"/> Sand, Gravel, Stones	<input type="checkbox"/> Building Construction ( <b>not</b> erosion control)
<input type="checkbox"/> Reed Bed	<input type="checkbox"/> Natural Rock/boulder	<input type="checkbox"/> Hard erosion control Rock armour, cement
<input type="checkbox"/> Dune	<input type="checkbox"/> Cliff	<input type="checkbox"/> Hard Erosion Control Sea Wall (  repair needs)
<input type="checkbox"/> Other (e.g. bog) .....	<input type="checkbox"/> Soft erosion control (man-made e.g. bank)	


**D INTERTIDAL** (From low to high water)    + see Extra Questions end page

**D1 Estimate the average width of the intertidal area at low tide.** (If width varies, tick all that apply)  
 < 5m     5-50m     50-250m     > 250m

**D2 What is the intertidal surface composed of:** (Tick max. four boxes)

<input type="checkbox"/> Solid rock	<input type="checkbox"/> Sand
<input type="checkbox"/> Boulders (>20cm ø)	<input type="checkbox"/> Silt or mud
<input type="checkbox"/> Gravel (0.2 – 20cm ø)	<input type="checkbox"/> Other (e.g. maerl, peat, walls, infill)

**D3 Which of the plants and seaweeds did you find in the intertidal&/or splashzone?**  
[Check ID poster/notes](#) extra seaweed and seagrass info and project ideas are available on [www.coastwatch.org](http://www.coastwatch.org)

<input type="checkbox"/> Glasswort ( <i>Salicornia</i> )	<input type="checkbox"/> Brown /or red seaweed growing
<input type="checkbox"/> Cord grass ( <i>Spartina</i> )	<input type="checkbox"/> Green seaweed: <u>patches or thin band</u>
 <input type="checkbox"/> Sea grass ( <i>Zostera</i> ) <input type="checkbox"/> growing <input type="checkbox"/> swept up	<input type="checkbox"/> Green seaweed: <u>carpet cover or thick mats</u>
<input type="checkbox"/> Other/ note:.....	<input type="checkbox"/> Dislodged decaying seaweeds of any kind

**D4 Any new or recent species of animal, plant, or seaweed which appeared in this area?**  
 Yes     No     Don't know    Name or note?.....  
 If yes, it could be climate change related species move, or an Invasive Alien Species (**IAS** - see Poster)

**D5 Indicate which of the animals listed below you found alive or dead – see ID notes**

Animal	Alive	Dead
Jellyfish		
Sea anemone		
Worms + casts		
Molluscs/seashells (empty shells = dead)		
Barnacles		
Crabs		
Sea urchins		
Starfish		
Fish		

Animal	Alive	Count (or estimate)	Dead	Count
Seabirds				
Seabirds <b>with oil</b>				
Seals				
Dolphins or Whales				
Rats				
Notes:				

If you found large numbers of live/dead animals (incl. live shellfish) washed up here today or recently, let us know what you saw and when in D5 note above. Coastwatch is researching causes of mass stranding of small animals and ways to help them survive.



# E LITTER, WASTE AND POLLUTION (at all shore levels)

**E1** **Tick** major item(s) found on your survey unit anywhere from start of hinterland to water  
Give any extra information in F6, take pictures if possible and note location if this requires follow up work.


<input type="checkbox"/>	Landfill Materials (e.g. concrete, rubble, debris from sea defences, demolition...)
<input type="checkbox"/>	Abandoned Vehicles, Girders, Machines
<input type="checkbox"/>	Household furnishings (e.g. beds, carpets, pieces of furniture etc.)
<input type="checkbox"/>	Dumped household refuse in bags or piles of rubbish
<input type="checkbox"/>	Shipwreck, or parts of ship wreckage
<input type="checkbox"/>	Tyres. Please count if more than 1 →
<input type="checkbox"/>	Aquaculture trestles and other large abandoned aquaculture gear
<input type="checkbox"/>	Other. Please specify .....

**E2** **LITTER Count:** Drinks containers and other items found anywhere on the shore.  
If there is too much to count, please estimate. If you didn't have time to count mark NC.

Drinks Containers:	Count	Drinks & Other Litter	Count
Plastic Bottles		Bottle Lids	
Metal Cans		Wet Wipes	
Glass Bottles		Plastic Shopping Bags	
Cartons/Tetra pack		Other*	

- if you see items which you think should be counted as a category in future.

**E3** **Tick** which of the following items of general litter or pollution you found on your unit.

- |  |   |                               |                                      |                                  |
|--|---|-------------------------------|--------------------------------------|----------------------------------|
| <input type="checkbox"/> Fishing or aquaculture gear; tick source(s) →   | <input type="checkbox"/> Traps  | <input type="checkbox"/> Nets | <input type="checkbox"/> Aquaculture | <input type="checkbox"/> Angling |
| <input type="checkbox"/> Rope and String   | <input type="checkbox"/> Geotextiles ( <i>new question see ID notes</i> )   |                               |                                      |                                  |
| <input type="checkbox"/> Hard Plastic containers like crates, buckets  | <input type="checkbox"/> Textiles, shoes, gloves and clothing               |                               |                                      |                                  |
|  <input type="checkbox"/> Foamed Polystyrene items or pieces (beads → E4) | <input type="checkbox"/> Paper, cardboard and worked wood                   |                               |                                      |                                  |
| <input type="checkbox"/> Sanitary waste, condoms, nappies  | <input type="checkbox"/> Food, fish waste and bones                         |                               |                                      |                                  |
| <input type="checkbox"/> Medical Waste - syringes, plasters ...  | <input type="checkbox"/> Faeces - mammal (e.g. dog, cow, human)             |                               |                                      |                                  |
| <input type="checkbox"/> Container(s) of hazardous but not medical substance (e.g. chemical drums empty or full)   | <input type="checkbox"/> Glass ( <b>not drinks</b> ), including light bulbs |                               |                                      |                                  |
| <input type="checkbox"/> Other plastics (not any of above, e.g. crisps)  | <input type="checkbox"/> Cans ( <b>not drinks</b> ), including sprays       |                               |                                      |                                  |
| <input type="checkbox"/> Tar, oil, petrol. If found, describe in F6. If action needed, contact & Coastwatch.   | <input type="checkbox"/> Other (e.g. balloons, dog poo bag)..               |                               |                                      |                                  |

**E4** **Micro litter pilot:** Is there an area where you see **tiny litter** threads, bits, polystyrene beads?

-   Yes  No **If yes**, please use the **Coastwatch micro litter app** which puts photo & location on line.

or describe: .....



**E5** Looking back, **which area was most littered?** If several, tick more than one.

- Splash zone  Tide mark  Intertidal  Sea

Was that litter:  accumulating in area(s) or  was it spread more or less evenly?



THANK YOU!!! All the nasty litter stuff done. Onward to the last page of the main questionnaire ...



# F GENERAL OBSERVATIONS

**F1 Has recent weather made the appearance of your coastal unit change?**

Yes, looks cleaner than usual

No, recent weather is insignificant

Yes, looks worse than usual

Don't know

If there are other reasons for changed appearance, please note space at F6 below.

**F2 Has the shore been cleaned within the last week?**

Yes  No  Don't know

**F3 Is there any planned change of character (positive or negative) which is imminent for this coastal unit? (If 'yes' describe in F6)**

Yes  No  Don't know

**F4 Tick if you have evidence of a serious risk and/or imminent planned change for the worse from any of the threats/activities listed below to your s.u. or adjacent sea/land.**

**ACTION:** In case of threat which requires immediate action, call relevant authority or Coastwatch.

- |   |   |   |
|---|---|---|
| <input type="checkbox"/> Erosion                  | <input type="checkbox"/> <u>Water pollution by</u>    | <input type="checkbox"/> Sewage                             |
| <input type="checkbox"/> Flooding                 | <input type="checkbox"/> Recreational abuse           | <input type="checkbox"/> Oil                                |
| <input type="checkbox"/> Mining/quarrying         | <input type="checkbox"/> Aquaculture                  | <input type="checkbox"/> Agricultural or industrial farming |
| <input type="checkbox"/> Construction/sealing     | <input type="checkbox"/> Invasive Alien Species (IAS) | <input type="checkbox"/> Industrial pollution               |
| <input type="checkbox"/> Dumping, tipping, infill | <input type="checkbox"/> Loss of Biodiversity         | <input type="checkbox"/> Other .....                        |

**F5 Is there something or things you really like or love about this survey unit? Tell us:**

**F6 Comments or observations:**

**Thank you so much for all your work!** If interested, there is more: Extra Nature & shore use questions PTO A harbour questionnaire and a seaweed pilot useful for biology and geography class are also on our website.

Please submit results (ideally online) as soon as possible and no later than **October 20<sup>th</sup>**.

**Data return, comment and queries?** Go to [www.coastwatch.org](http://www.coastwatch.org) or your regional coordinator, send an email to [survey@coastwatch.org](mailto:survey@coastwatch.org) or if urgent Karin [kdubsky@coastwatch.org](mailto:kdubsky@coastwatch.org) 00353 (0)86 8111 684.



**Biodiversity – just a few important members of 3 groups which may be found on your shore:**

**I. Worms:** note if you see worms, their casts, reefs or large patches with lots of:

Worms (other add in bottom box)	Found?	Comment (Amounts/ noteworthy change)
Lug worm ( <i>Arenicola</i> ) casts (at all shore levels)		
Honeycomb ( <i>Sabellaria</i> ) reef (Mid-Low shore levels)		
Sand mason ( <i>Lanice</i> ) bed &/or casts (low shore and shallow sand/shingle pools)		
Other Worm of note?		

**II. Sea shells:** A small selection to focus on - see new [Coastwatch Seashell poster for ID](#) these and more.

Sea shells and eggs	Alive	Dead (empty shell)	Describe your find. (e.g. large mussel bed, or tiny mussel spat in a few cracks on rocks, Gigas oyster stuck to rocks ...)	Photo or specimen for ID?
Mussel				
Native oyster				
Gigas oyster				
Cockle				
Razor shell				
Limpet				
Slipper limpet				
Dogwhelk				
Shellfish eggs				
Other:				

**III. Fish:** photos to help identify species of fish and fish egg cases are extra welcome. See guide notes on ways to find them.

Did you see fish?  No  Yes - If you identified please note:  .....

Count/estimate:  What shape? streamline  flatfish   eel-like 

If you know this place, did you see fish here before?  No  Yes .....

Did you find any fish egg case(s)?  No  Yes  if yes please estimate count:  collect/photo

**Harvesting from the sea**

Do you see or know of aquaculture, collecting for home use, or commercial harvesting? (Add if other)

	Aquaculture	Harvesting	Commercial Harvesting	Comment
Seaweed				
Mussel				
Oyster				
Periwinkle				
Crab				
Lobster				
Fish				
Other				

**Government is preparing a Marine Spatial Plan (MSP).** Does your survey area have important intertidal or submerged features (Nature, archaeology, etc) or traditional use to be marked in our MSP (see guide notes)





# EXTRA INTERNATIONAL MARINE LITTER PAGE

## COASTWATCH SURVEY 2020

IF YOU HAVE DONE A FULL SURVEY UNIT AND YOU WOULD LIKE TO TACKLE ANOTHER ONE, BUT TIME OR TIDE ARE AGAINST YOU, PLEASE JUST COMPLETE THIS PAGE FOR THE NEXT SURVEY UNIT AND WHEN ENTERING THE INFORMATION ON LINE COMPLETE TOGETHER WITH THE A SECTION SO WE KNOW WHERE YOU SURVEYED

This will be the first methodically collected COVID related marine litter Coastwatch survey and we hope to carry it out in several countries to help highlight need for prevention and care with disposal.



### LITTER ASSOCIATED WITH PROTECTION FROM COVID-19

Please count any of the listed COVID related litter you found in your survey unit. If the litter isn't in your survey unit yet, but found on access points, like beach car parks, please count and note in comments.

Tick/count	Items	Any comment? or other COVID related waste like hand sanitisers?
	Mask	
	Bleach containers	
	Wipes	
	Single use gloves	

Reusable masks are officially encouraged in Ireland to minimise waste. <https://www2.hse.ie/conditions/coronavirus/face-masks-disposable-gloves.html>

### SINGLE USE PLASTICS (SUP) DIRECTIVE

Have you heard of the [single use plastics directive](#) ? The extra litter questions below picks on plastic items which will no longer be legally on sale across the EU by July 2021 as stipulated in Article 5 of this EU law. Many producers and shops have already substituted the plastic to comply ahead of time. This survey gathers the litter data just ahead of the ban.

Did you see any of these **Single-Use Plastic** products on your shore between edge of hinterland and water's edge or floating on water? Please tick if yes and if time allows add a count or estimate where you found large amounts. We are also planning an exhibition, so photos are very welcome.

Tick/count	Plastic Item which will no longer be placed on the market by July 2021
	Plastic cotton bud sticks
	Plastic cutlery (forks, knives, spoons, chopsticks);
	Plastic single use plates; including paper plates with plastic film
	Plastic straws
	Plastic Beverage stirrers;
	Plastic Sticks to be attached to balloons,
	<b>Polystyrene</b> food containers. (Usually boxes, with food like chips, salad, intended for consumption without cooking/heating)
	<b>Polystyrene beverage</b> (coffee, tea, soup) containers.
	Take away drinks/soup container <b>lids</b> ( NB - the SUP Law states 'polystyrene beverage containers incl. their <b>caps &amp; lids</b> ') We usually don't know whose lid it was, once its litter and the sea doesn't care
ANY COMMENTS?	

Thank you so much - don't forget to submit answers online using our input form [www.coastwatch.org/europe/input-form/](http://www.coastwatch.org/europe/input-form/) or post a hard copy