Coastwatch

All Ireland Coastwatch Survey
Sept 15th – Oct 15th, 2023
METHOD IN 5 STEPS

1.   Select your survey area on the Coastwatch map

1.1 Zoom in on the Coastwatch map until you see blue and white lines appear – each denoting a 500 meter "survey unit" or **SU**. Then zoom further and **click on** a SU you want to survey. As the blue or white line turns turquoise, look left beside the map, where there is a booking note, and below that, your SU code pops up. This **Country** x **County** x **Block** x **Unit** code needs to be written into your shore **Survey Form question A1** to identify it for GIS mapping later.
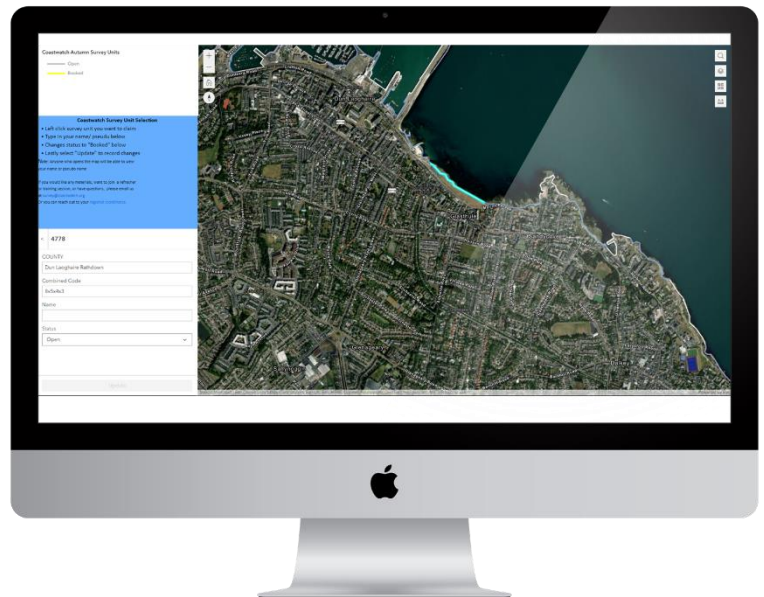
NB – if no blue & white lines come up where you want to survey, the area (often island) hasn't been digitized yet. Please contact survey@coastwatch.org to ask for it to be digitized too.

1.2   Book your SU by following the steps in the left panel of the map (see screenshot)

NB – This is new. Up to now bookings came as email or form requests which we manually entered on the map. Kevin designed this new version so you can book with immediate effect.

Note: anyone opening the map can see your name. If not comfortable with that, please use initials or a pseudonym.

As this is a new booking feature, there may be issues on some devices. Please contact us re any problem or comments survey@coastwatch.org

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2.   Get Tools and Materials

Go to our new website www.coastwatch.org and download materials for print, or store on your phone. Here what you need and what comes in useful:

2.1 Coastwatch Survey Form: If surveying for the first time, we advise you print a copy, or ask Coastwatch regional or national coordination for a hard copy.

> Tip: fit data from 2 surveys onto 1 form by using different colour biros for information unique to each.
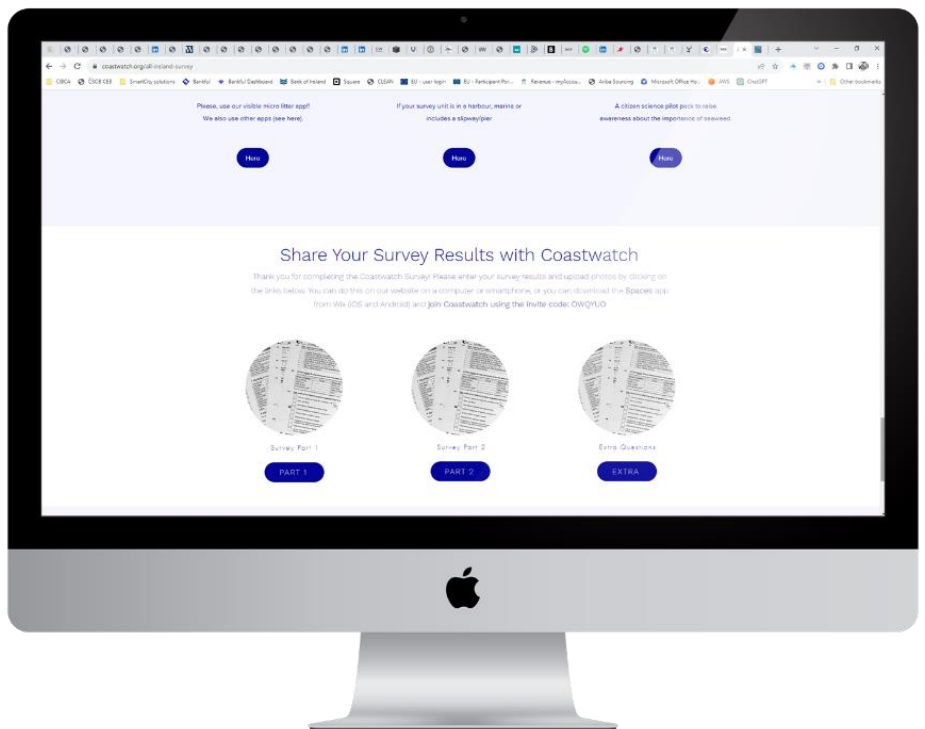
2.2 Inputting Survey Data: You can complete the survey form using our new app while on the shore. Download the **Spaces** app from Wix ([iOS](#) and [Android](#)) and **join Coastwatch using the invite code: OWQYUO**, or on our **website [here](#)** (see screenshot)

2.3 Detailed **Survey Guide Notes** which are useful for reference and teaching. You might prefer to browse online or look up/copy select parts.

2.4 ID posters of wildlife and invasive species included in the survey. Download posters onto your phone or open them on your computer and then photograph for easy reference while out surveying. We also have some hard copies on request.

2.5 Nitrate inflow water tests are no longer available individually wrapped for posting. Therefore, collect inflow water samples in <u>clean containers (like small empty water bottles)</u> and write survey code, date, time and your initials on it. Keep it in a cool place for testing with your regional Coordinator or discuss alternative with your Coordinator.
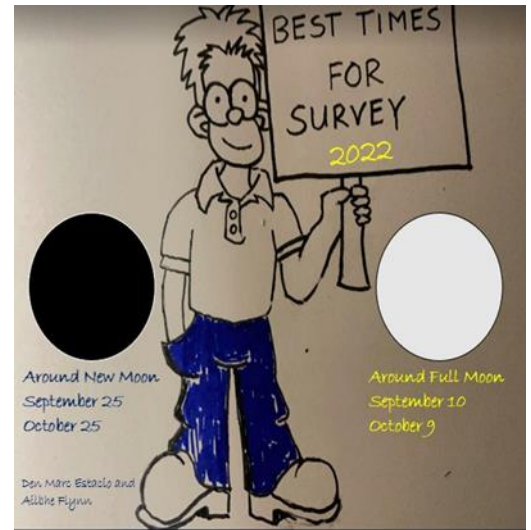
2.6 For your own useful materials, please see what to pack in **3.3** below.

3. Plan your survey

3.1 Time: check tide table for suitable **low tides** e.g. on
www.seatemperatu.re/europe/ireland/tides.html

- Spring tides: Three days around **full and new moon** are when you can expect to catch the lowest tides. If you can survey then, you are likely to find interesting biota normally covered by the sea – e.g. a *Zostera marina* seagrass meadow.
- Plan to start surveying around an hour before low tide.
- Check weather forecast to avoid rain, heavy swell, and big waves.

3.2 Logistics and minimizing your carbon footprint: Plan how to get there and agree on a meeting point if surveying with others. Can you get to your survey unit on foot or bike? If by car, can you give lifts and plan a few drop off pick up points to cover a larger area which might feature as case study?

3.3 Pack survey forms, biros, well charged phone with camera, a zip sandwich bag type plastic bag and/or yogurt bucket to collect interesting materials. Take boots or dive shoes, layers of clothes, a hanky and rain gear with you. If an inflow from land is entering your SU, try to get nitrate/nitrite test sticks and colour chart. If you don't have them to hand or are surveying with friends, you might all test afterwards together. Each one takes a small clean empty water bottle to collect the water and label it. Then in meeting after finishing the survey each one tests and all tests are recorded by photo and on forms. This is also ideal for doing extra tests where only one colour chart is available.

Planning to survey with a school, scout or family group? You could divide the survey questions between you before you go out and distribute relevant pages.

Group Survey Hints

Talk about the survey beforehand. Chose a survey unit (SU), print the survey form and prepare. Check for inflows, as they feature in task assignment. Then assign survey questions to group members so they can focus on a few questions at a time and spread out on the shore. Any gathering on the shore should take weather into account. On a windy day, seek shelter and move to keep warm.

The example below can be used as a template and group member names added. It is based on a group of 6 students surveying one survey unit in ±1 hour. In the first 10 mins the 6 are in 2 groups. In the second slot they all work independently. In the last slot they all work together. Allow more time on a super site with several inflows, boulders, rocks and mud in between and quadruple the enjoyment. If planning to cover several survey units, start with the simplest one.

Time	Form	Surveyors	Task/Survey section	Names of those allocated to the task
	Page 1	All at home	All complete first part before going out. Finish together on arrival or at the end.	

Time	Form	Surveyors	Task/Survey section	Names of those allocated to the task
First 10mins zig-zag brisk walk to end of SU	Page 2	2 surveyors share page	B Hinterland and inflows: if stream present: 1 tests water, one records & also lifts stones to check for life. one photographs, checking stream banks for invasive alien species.	
	Page 3	2 surveyors share page	C section and D1 and 2: both scout the shore and report. One acts as the scribe, other takes photographs	
	Page 3	2 surveyors share page	D 3 **plants** and D 4 IAS, one is scribe, both or either photograph They may also start on animals in D 4 & 5.	

Time	Form	Surveyors	Task/Survey section	Names of those allocated to the task
15min zig-zag walk back	Page 4 Page 4 Page 4 Page 4 Page 4 Page 7	6 work individually	Litter and Oil: 1 checks for biggest E 1 and smallest E4 1 Counts E2 first column drinks litter 1 counts E 2 second column of items 1 checks E 3 general litter (tick not count) 1 covers E 4 and 5 area most littered. 1 covers extra COVID and SUP Directive. + Anyone who has time looks out for micro litter.	

Time	Form	Surveyors	Task/Survey section	Names of those allocated to the task
30mins	Page 5 & 6	All together	Shore life D5 + Extra page all together Reflective F page (+ finish and Page 1)	Scribe 1 first 10 min: Scribe 2

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4. Arrived on site ready to survey

4.1 Scout it out on arrival:

Have a **quiet scout** first. Are there any animals around which should not be disturbed, e.g. a seal pup? (Tip: when looking for seagrass, watch where happy Brent geese feed).

Is the tide as you predicted? If unsure place a stick/stone at the water's edge and check a few minutes later. If the tide is just turning or coming in, start surveying at the water's edge, working up the shore. Otherwise work down the shore towards the receding water.

4.2 Notice, Assess and React wisely to problems:

Something worrying or illegal going on? A quick response can prevent or minimize harm. Photograph, report to the relevant authority quickly and keep tabs of your action and reactions. Call Coastwatch if in doubt – 086 8111 684 or text survey@coastwatch.org.

A dead or dying bird may have bird flu but could have died of other causes. Don't touch it to be sure. Follow Bird flu advice or contact Coastwatch. Are there any **jellyfish** in the water or on shore? Most are harmless to us, but avoid the Lion's Mane and Portuguese Man of War as they can sting even when beached!

4.3 Survey

Complete the survey form while zigzagging the shore. Take lots of photos. NB: some experienced Coastwatchers just use their photos and phone notes in the field, then complete the survey on app or computer input form (or you can input the data on our website here whilst on the beach). We advise you bring a hard copy of the survey form for reference.

Stream Note: if your site includes a stream, put some time into discovering it.

Exploring a stream with lots of life can be a brilliant experience. Check for life and Nitrates above sea water influence. Wear gloves as a precaution. Think of a stream bed like a village. Creatures live here. The water may be fresh, brackish or salty depending on the stream and time. If lifting stones, gently put them back. Mobile animals you might net like fish, shrimp or crabs are best viewed in a big plastic bag with water (see boy holding one with a fish he caught) as water magnifies your find. Take a close look and photograph. Put animals back to where you found them **within 2 mins.**

5.   Data and Picture return

Once you have surveyed, please return your data as soon as possible. There are three different ways now to do this:

1) Use our new **phone** app ([iOS](#) and [Android](#))**,** so while you are having a nice hot drink after the survey and everything is still fresh in your mind, it goes straight in and off to us.
2) Use the [input form](#) on our website on your phone or computer
3) Post to Coastwatch, Civil Engineering, TCD, D2

Pictures can be uploaded directly with your survey form. If you prefer, pictures can still be emailed to **survey@coastwatch.org** (make sure you indicate survey site and if we are to attribute these pictures to you or not)

FOUND SOMETHING VERY SPECIAL OR AWFUL? PHOTOGRAPH & SHOUT!
- Contact your regional coordinator or Coastwatch HQ immediately.
- If it's a new seagrass bed, we might be able to get out, verify and include it in a new Interactive Seagrass map and report on this biodiverse blue carbon habitat.
- If it's dumping or heavy litter deposition, take photos and contact An Taisce's [Clean Coasts](#) who are running the autumn clean up so they might include it.
- If it's oil or other pollution which requires immediate action, take photos and phone your county council environment section and IFI.

AFTERWARDS
Your data will be put together with that of other surveyors, analysed and mapped to compare to and add to official data. If you found something very special, contact your regional coordinator or HQ immediately. If it's a new seagrass bed, we might be able to get out and look at it more closely to include it in a new Interactive Seagrass map and report.

Result high and low lights will be published in early December, and you will be notified if you shared your contact details with us. Hopefully we will be able to see you in a results workshop in Trinity College Dublin to celebrate our joint citizen science work and discuss how data and other findings can best be used to protect and restore our coast. Two confirmed topics for the 2023 results are:

  I.   Single use Plastics - your findings and the SUP law
 II.   Results of the 2023 Seagrass Campaign

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Any Questions?

Please email survey@coastwatch.org, contact us via our website (bottom of page www.Coastwatch.org), reach out to your regional coordinator (see table), or use our Facebook page.

Regional Coordinators are giving their time and expertise. Most are not able to incorporate it into their jobs. They are volunteers too…

- they have a small stock of hard copy forms, posters and test kits
- they might be organising or helping you to organise a local survey training event or a "blitz" so a whole area can be covered
- they may know your coast and have expertise in an area, but they aren't God 😉

Acknowledgements:

This citizen science project is based on volunteer work at all levels. And huge thank you to all for support - whether its surveying, giving time as regional coordinator or core team, training, roping in friends or following up on issues encountered on the shore.

We would like to gratefully acknowledge Trinity College Dublin for hosting our HQ office and essential financial support from the Marine Unit of the Department of Housing, Planning and Local government.

Further Information:

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Data/GIS/web: Kevin Lynch and Paul Dubsky
Social Media: Bernie Connolly, CEF
Regional Coordinators listed overleaf. Any updates can be found on our website.