

All Ireland Coastwatch Survey

Sept 15th – Oct 15th, 2024

METHOD IN 5 STEPS

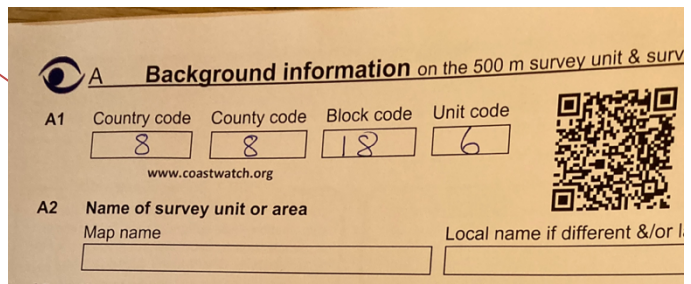
STEP 1: Select and book your survey area on the [Coastwatch map](#)

1.1 Zoom in on the [Coastwatch map](#) on your laptop or use QR code to do it on your phone) 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 pick. Once clicked on, a blue or white line will turn turquoise and your su code pop up. This **Country x County x Block x Unit** code (here 8x8x18x6) needs to be written into your shore **Survey Form question A1** to identify it and map it later in results.

NB _ If there are blue & white lines on the map, but not where you want to survey, the area (often an island) hasn't been digitized yet. Please contact survey@coastwatch.org to ask for it to be digitized too.



A Background information on the 500 m survey unit & survey

A1 Country code County code Block code Unit code

www.coastwatch.org

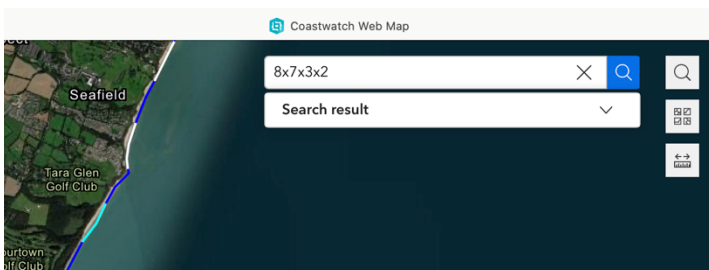
A2 Name of survey unit or area
 Map name Local name if different &/or I.

1.2 Book your su

Once the su is highlighted and su code appears, the booking steps pop up under it. Copy the survey unit code, then click [HERE](#) to open the booking form and complete it. Once you are familiar it takes 1-2 m minutes. Send Kevin an email to book a number of su in one batch. How it works: Once a day Kevin checks the bookings and weed out oddities. Then lets them populate the map. So your booking should appear as a green dot on the updated map within 24 hours.

1.3 Going back to the booked unit and photo of screen

You may want to print out a map with the booked su and others near by. Best to do



this on the computer. Open the Coastwatch map and key the survey code into the search as shown in screenshot. Click on the magnifying glass. This will zoom to your su and highlight it, without the booking box. It is then easy to enlarge or print out. A printed map is also useful for marking special or awful finds.

STEP 2: Plan your Survey Day and Gear + Group Survey Hints

2.1 Time

- Check a tide table for suitable **low tides** e.g. on <http://bit.do/tidetime>.
Spring tides: **Full and new moon + 3 days** is when you can expect to catch the lowest tides. If you can survey then, you are likely to find extra interesting biota normally covered by the sea – e.g. a *Zostera marina* seagrass meadow or sponges.

September 2nd New Moon,

September 17th full (Harvest) moon

October 2nd New Moon

Oct 17th full (Hunter's) Moon

- Plan to start surveying around an hour before low tide.

2.2 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?
- Weather: Check weather forecast to avoid rain, heavy swell, and big waves. You don't have to do the booked area if on the day a more sheltered shore is still open gio to it instead.

2.3 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.

NB – if you would like to go out with a group or join a training session, check social media, or contact your [Regional Coordinator](#).

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. See Group survey example overleaf.

Group Survey Hints - Example

Talk about the survey aims and plans. Chose a survey unit (su) or more, print the survey form and prepare. Inflows feature in task assignment, so check for inflows using a satellite map or by quick prep fieldtrip. Assign survey questions to group members so they can focus on a few questions (page at a time). Agree a meeting point for the last 30 min surveying together. On a windy day, 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 focusing on one survey unit for 1 hour. For the first 10 mins the 6 are divided into 2 groups. In the second phase (\pm 15 min) they all work independently. In the last phase they all work together. Allow more time on a site with several inflows and interesting habitats. Its quadruple the enjoyment.

If planning to cover several survey units, start with the simplest one. If you have a larger group, add more surveyors to each task, or divide group members to cover a larger area.

Time	Survey Form	Surveyors	Task/Survey section	Names of those allocated to the task
	Page 1	Indoors if preferred	Complete most of A part of the survey before going out onto the shore. Finish on arrival or at the end.	

First 10 mins: zig-zag brisk walk to end of su	Page 2	Pairs of Surveyors choose survey form section B, or C or D questions / tasks	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		C section + D1 and 2: pair scouts the shore. One sees & acts as the scribe, the other tells and takes photographs	
	Page 3		D 3 plants and D 4 IAS, one is scribe, both (or either one) photograph. They may also start on animals in D 4 & 5.	

Agree call or alarm to switch to waste, litter and oil

15min zig-zag walk back		6 work individually Agree	<u>Waste, Litter and Oil:</u>	
	Page 4		1 checks for biggest E 1 & micro litter E4 Just tick if present & photo. Tyres count.	
	Page 4		1 Counts E2 1 st column drinks litter items	
	Page 4		1 counts E 2 second column of items	
	Page 4		1 checks E 3 general litter (tick presence)	
	Page 4		1 does E5 area most littered & supports Extra questions SUP Directive.	
	Page 7		1 covers EXTRA SUP Directive waste.	
			+ <u>Anyone</u> who has time looks out for waste sources at the landward border	

Agree a call or alarm to all join for the special part

30mins	Page 5 & 6	All together	<u>Shore life D5 + Extra page Biodiversity + Reflective F page</u>	Scribe 1: Scribe 2
Conclude		Group leaders	Conclude, nothing left behind, plan data input and any follow up. If inputting on computer 3 parts can be done in parallel	

STEP 3: Get Tools and Materials

Get the survey form either from coordinators in hard copy or go to our website www.coastwatch.org and download materials. Choose what to print and what to store on your phone. Here what you need and what comes in useful:

3.1 NEED: Coastwatch Survey Form: print a copy, or ask Coastwatch [regional or national coordination](#) for a hard copy and read it carefully together with explanations of questions in the online **Question Guide**.

3.2 The Question Guide is a reference and teaching tool. Browse online or look up/copy select parts.

3.3 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.

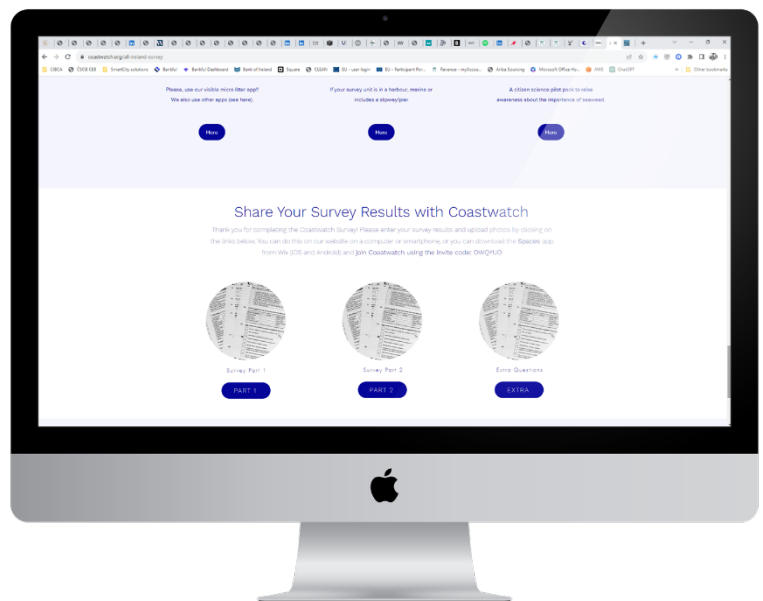
3.4 Inflow tests: Nitrate inflow water tests individually wrapped can be collected from your regional coordinator or posted from HQ. Follow instructions and see Question guide. If you haven't got the tests but want to go out to survey, collect inflow water samples in clean containers (like small empty water bottles) write survey code, date, time and your initials on each and keep in a **cool dark place** for testing later. A group might get together and all test at the same time and discuss. As indicator of how much sediment is carried in that ditch or stream, take water from mid stream or lowr without disturbing the bottom into a Greek yoghurt container and let water settle for 2 min.

3.5 ID card Coastwatch bookmark to identify the plastic consumer items are made of and how easy or hard it is to recycle them.

3.6 Add your own useful materials including waterproof gear and phone bag, clip board, hanky, plaster, hairband and thin extra layer which can serve as scarf. 2 biros, camera phone and perhaps a picnic.

3.7 If you wish you can input Survey findings directly into 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).

Opportunity: If the survey is being done by a group and one has a broken leg or is in a wheelchair then that person might act as data inputter on the app and the others run over and give information they have scouted out.



STEP 4 Arrived on Site ready to Survey


4.1 Scout it out on arrival:

Have a **quiet scout** first. Any animals around which must not be disturbed – e.g. a seal pup or can tolerate you like Brent geese if surveyors move slow and dogs are on the lead. (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 turning or coming in, start surveying at the water's edge, working up the shore. Otherwise work down 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 text or survey@coastwatch.org.

A dead or dying bird or seal may be sick. Don't touch but photograph including possible causes. Contact BirdWatch, Coastwatch or your wildlife ranger if concerned.

Check for **jellyfish** in the water or swept up. Most are harmless to us, but the Lion's Mane can sting badly even when beached! Check for soft mud, and make sure surveyors avoid walking into it.

Nb - **Anaerobic mud** with signs of seagrass or dying shellfish should be recorded. See opportunistic green seaweed and dead bleached white seagrass in anaerobic mud in photo here.



4.3 Survey

Bring 1 hard copy of the survey form and complete it while zigzagging the shore. Take lots of photos. If noting litter, pick up anything dangerous for wildlife e.g. loops or fine nets animals can get entangled in. Take photos and sample of anything for follow up with report or clean up.

NB: some experienced Coastwatchers just use their photos and short notes in the field, then input their findings on app or computer immediately afterwards.

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 and visit



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.**



STEP 5 Data and Picture return:

Once you have surveyed, share 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 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. Please complete all 3 parts even if you have few answers in 'Extra Questions'.
- 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.
- If it's a new **seagrass bed**, we will try to get out, verify and celebrate. If your find is new, you are invited to christen the bed and we add it to the inventory. We plan are planning a seagrass event with acknowledgements in early 2025. Intact mussel beds and maerl are similarly very high value and will be mapped separately.
- If it's **dumping or heavy litter deposition**, take photos and contact the county council or local clean up group to it gets removed before spring tides break it up.
- If it's oil or other **pollution** which requires immediate action, take photos and phone as relevant: your county council (google out of hours emergency number), Port, IFI, Coastguard, EPA and/or Coastwatch.

NB - We are preparing a video on this bewildering area and looking for your experience.

What happens next?

Your data will be put together with that of other surveyors, checked, analysed and set out in graphs to highlight key findings. Some results will be mapped.

Result will be published in early December. We would love to see you at the results launch in Trinity College Dublin (or on zoom) to celebrate our joint citizen science work and discuss how these findings can best be used to protect and restore our coast.

Follow Up work.

If you saw anything which needs to be addressed asap then call the relevant body &/or Coastwatch. Waste clean ups can be valuable community work, but even more if dealing with the source(s) to prevent recurrence. Preventing water pollution and wetland infill are Coastwatch priorities. We are part of 2 international projects now. One is called **More4Nature** working towards better environmental law enforcement with public participation.

Any Questions?

Please email survey@coastwatch.org, contact us via our website (bottom of page www.Coastwatch.org), reach out to your regional coordinator click [here](#) to see list and contacts, or direct your query to web or data management directly – see below.

A Regional Coordinator Note:

These are giving their time and expertise as volunteers. They have a small stock of hard copy forms, posters and test kits and might organise or help you to organise a local survey training event, or perhaps a “blitz” so a bay or island can be covered. They may or may not know your bit of coast. There is a lot of expertise in the coordinator team, so interesting questions might be passed on.

Coastwatch Regional Coordinators updates - check website

Address: Coastwatch Civil, Structural and Environ Eng. Trinity College Dublin, Dublin 2

General email: survey@coastwatch.org

International coordinator: Karin Dubsy +353 (0)86 8111 684, kdubsky@tcd.ie

Questions re Bookings, Maps GIS Kevin Lynch klynch@riochtgis.ie

Website Paul Dubsy paul.a.dubsky@gmail.com

Social Media: Bernie Connolly bernieconnolly@coastwatch.org

Further Information:

Watch for updates, training sessions, zoom calls on social media and web.

www.coastwatch.org



Acknowledgements:

This citizen science project is based on volunteer work at all levels. A 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 thank the Department of Environment, Climate and Communications for essential financial support.