# COASTWATCH Survey In 5 Steps

Jimmy Arnold & Karin Dubsky September 2018



### **COASTWATCH EUROPE**

**Value, Protection and Management** 



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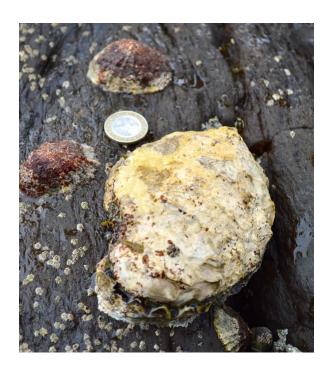
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# Why Do We Survey?

## **Invasive Alien Species**

Gigas Oyster (Aquaculture)





Fishing / Aquaculture and Consumer

**Marine Litter** 

- Get to Know your Coast
- Information

## **Indicator Species**

Zostera noltii (Sea grass)





## The 5 Steps for a Successful Survey

- 1. Where to Survey on the COASTWATCH Map
- 2. Materials
- 3. Plan your Survey
- 4. SURVEY
- 5. Data and Picture Return



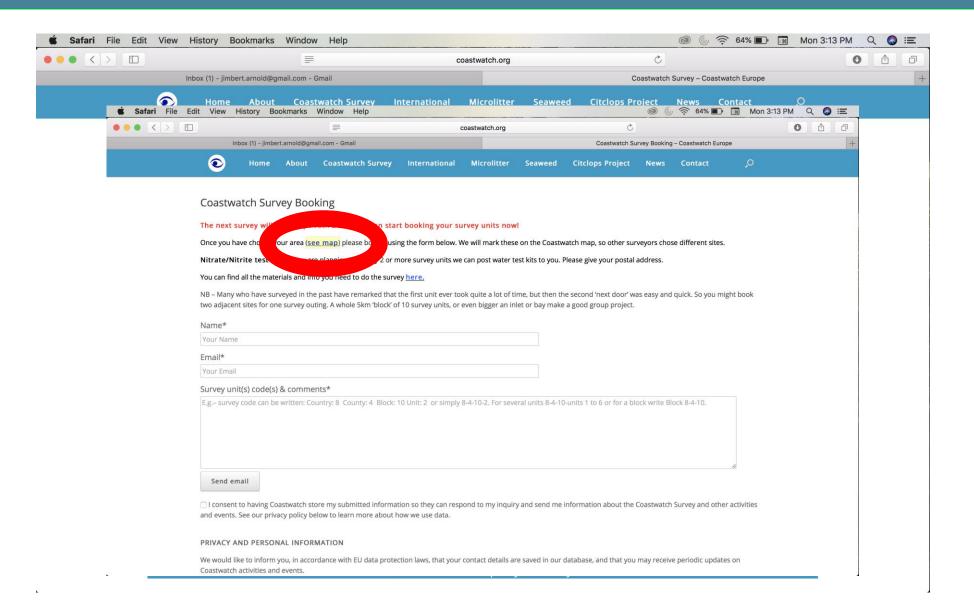




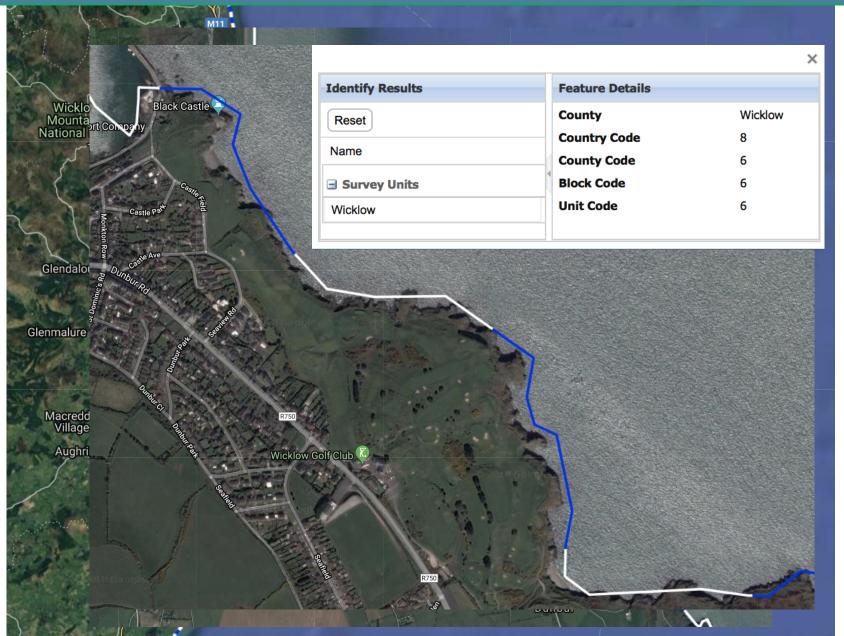




Booking Your Survey Unit









## Things to have for your survey

- 1. Questionnaire/ online version
- 2. Clip board and Biros
- 3. Nitrate Test Kits and Colour Chart if there is an inflow
- 4. Map of Survey Unit
- 5. Small bucket to collect interesting things
- 6. Boots / Wellys
- 7. Rain Gear and Layers
- 8. Phone with pictures of Bio ID Posters
- 9. Micro Litter App + others on your mobile device (or online version)



## The Plan

- 1. Read questionnaire and prepare materials complete question A1
- 2. Check weather forecast and low tide time
- 3. Plan meet time before LOW TIDE ideally start surveying 1 hour before Low Tide
- 4. Allow 1 1.5 hours per S.U. (Seasoned surveyors can survey a simple shore in 20 minutes)
- 5. Where are you going to meet?
- 6. How are you getting TO AND FROM the S.U. car, cycle, bus?
- 7. For schools, split up into groups of 2 to 6 and assign parts questionnaire to each group
- 8. Tell someone where you are going (Health and Safety)



## FINALLY SURVEYING

- 1. Start at one end of the survey unit
- 2. Walk in a zig-zag pattern from hinterland to low water
- 3. Test inflows (streams, pipes) for quality indicators including nitrate concentration and Invasive Alien Species (Giant Hogweed)



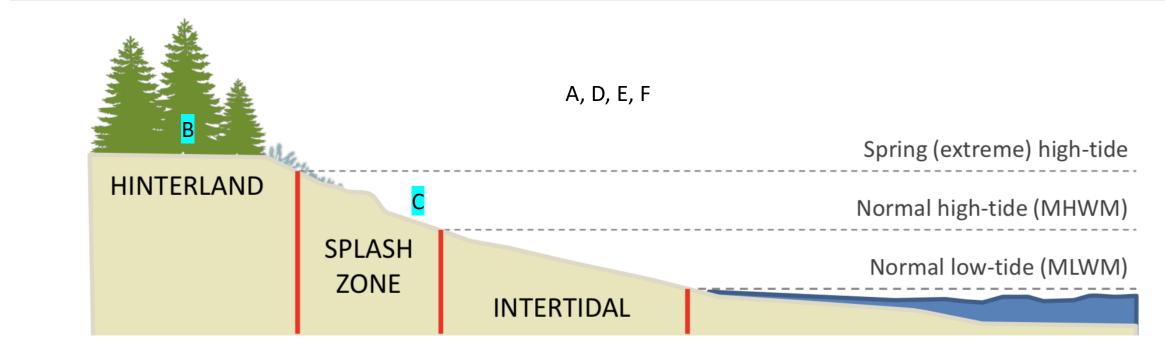
Picture 8: Inflows testing; Paul Leahy



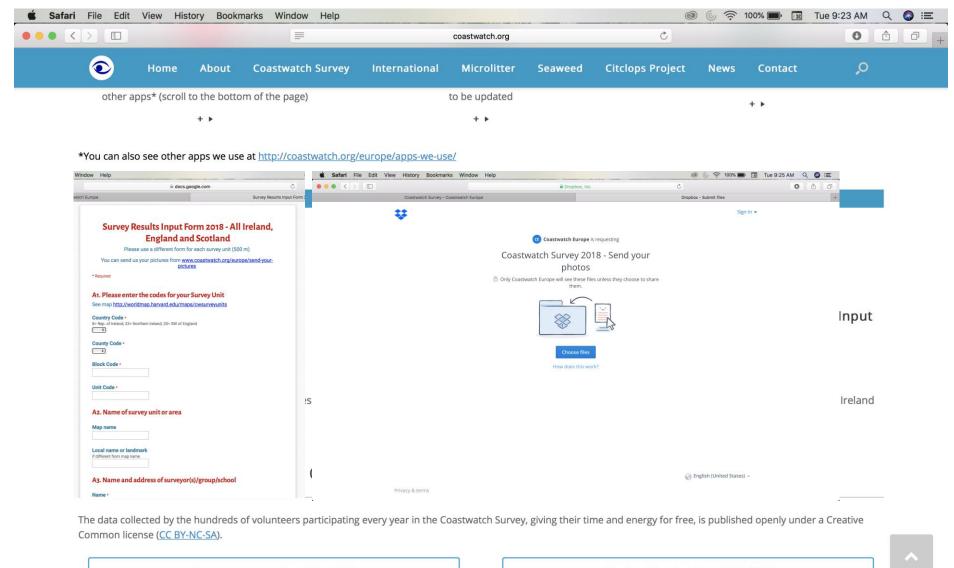


#### THIS SURVEY FORM IS ORGANISED IN THEMATIC SECTIONS

Section	Covering	Page
Α	Surveyors, Area Designation & Access to the Shore	1
B <sup>l</sup>	Hinterland, Inflows (water draining from land) and Sewage Pollution	2
<mark>C</mark> , 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	5
Extra: Biodiversity &Use	Biodiversity and shore use specific for your country or region	6







Inputing your Data



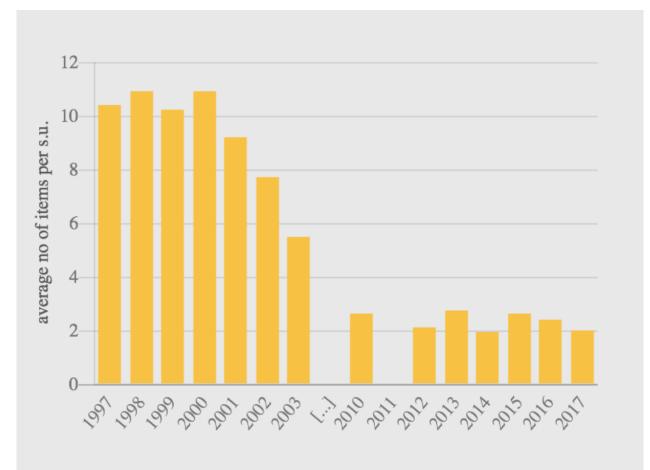
Coastwatch Survey Data 2012 - 2018

All Ireland historical data (1987 - 2017)

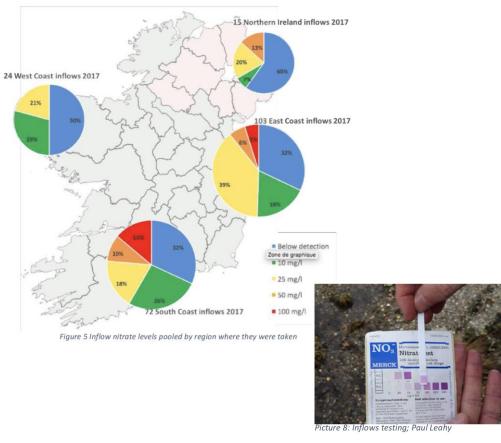


## What Happens with Data

Plastic Bag Counts/ S.U. Before and After Tax



# Nitrate Concentration in Inflows Tested 2017 Survey by Region



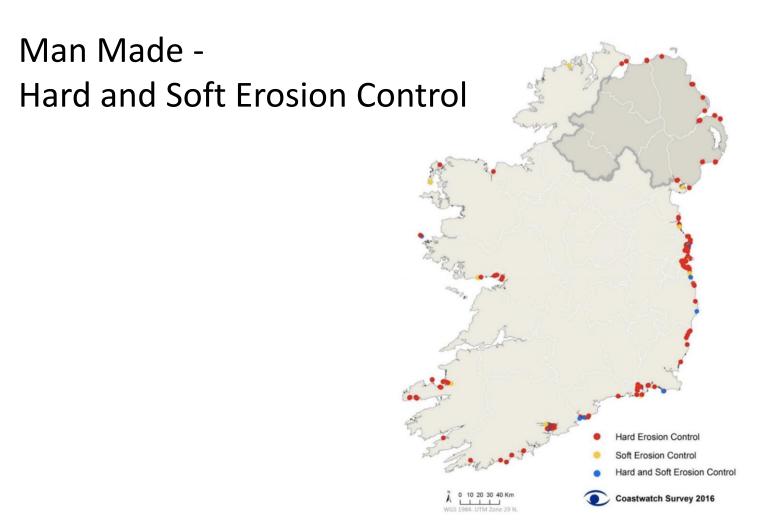


Figure 2. 9 Sites where surveyors reported seeing hard and/or soft erosion control (where 'hard' was defined as wall, rock armour, or gabions and 'soft' as earth banks, marram grass planting, or similar)



# Thank you for your Attention Special Thank You to Deirdre Burns & Pat O'Suilleabhain For being our Wicklow County Regional Coordinators & Wicklow County Council for including Coastwatch in this event. Questions?