Addressing IAS Pressures on Seagrass

*SPARTINA anglica*
Identify the Problem

1. Participate in Coastwatch survey
2. Ask the experts

Invasive SPARTINA is encroaching Seagrass on the mud flats
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:
   [ ] (UNESCO) Biosphere Reserve
   [ ] RAMSAR Site
   [ ] Natura 2000 site (SPA, cSAC or SAC)
   [ ] National Park
   [ ] Other Nature designation

Identify protection status
Record status on Coastwatch survey
Assess the Potential Problem

- A simple assessment using citizen science
- Combining modern tech and ancient tools
Planning 2023

1. Who is responsible for monitoring and controlling Spartina in this N 2000 site?

2. Could Coastwatch work with responsible authorities in a joint project? Or should Coastwatch seek approvals and financial support to pilot different removal methods in 2023 and then use the best one(s) for major work in 2024?

3. Pilot Qs: Can Spartina be removed easily? What factors have to be considered? E.g. tides, season, sediment type, age of Spartina, avoiding damage to other biota..

4. What permits are required to remove Spartina?
   - any shore/ a N 2000 site
   - today & once l authorities have taken on near shore responsibility next year.

World Wetlands Day
02/02/23
Theme: Restoration
Honeycomb Reef

Sabellaria alveolata
Described as a ‘DYNAMIC ECOSYSTEM ENGINEER’
Starring

Sabellaria alveolata

as

The Honeycomb Reef Worm
Tiny bits of shells are the main building material used in the reef formations.
Typically found in areas where rocky reef meets a beach providing coarse sand for tube building.
The Honeycomb reef supports a great variety of marine life even when the worms are no longer present.
Due to their dynamic nature there is still much unknown about these reef formations.
*Sabellaria alveolata* is currently classed as ‘Data Deficient’.
PRESSURES
Eroded through wave action
Sand Binder

R. floridula
Dead Birds Coastwatch
Survey 2022

Photo: Áine Walsh
Our results

Total dead birds found - 320 over 719 survey units

Surveyors found close to 1 dead bird per kilometre of shore and in a quarter of all shores surveyed (N=731) one or more dead seabirds were found.

This year there has been the largest amount of birds per survey units since 1993

Of those 320, we identified 100. Of those, 62 were gannets

15% of finds over three birds were also of gannets - rest were unidentified
A note on the data

- our coastwatch data cap only what we saw on a given day at a given time

After a bird died, it could have been fallen into the sea, taken off by a dog or a fox or covered by sand

Officials from the county council also collected birds.
What is Avian Flu?

Officially classified as HPAI / LPAI

HPAI can have up to 100% mortality rate in affected flocks

It is a viral disease which can affect the respiratory, digestive and/or nervous systems of many different species of birds
Coastwatch Dead Seabird and gannet breeding ground maps

Chicks ringed
- >10,000
- 1000–9999
- <1000
- Nil

Coastwatch Autumn Survey 2022
Dead Seabird Count
- 6
- 5
- 4
- 3
- 2
- 1

Note: This report estimates the number of dead seabirds based on our mapping. Responsibility cannot be taken for the accuracy of this information. Use of this information is at your own risk and risk of damage or interference is not taken. Always be aware of your safety before accessing any mapping data.
Coastwatch dead bird map and DAFM wild bird avian flu map
Number of birds per survey unit

- None: 40.8%
- One: 34.3%
- Two: 12.7%
- Three: 5.2%
- Six: 2.3%
Dead bird species

Species
- Unidentified: 70.4%
- Gannets: 19.2%
- Gulls: 7.7%
- Guillemots: 0.9%
- Heron: 1.2%
- Other: 0.6%

Species
- Gannets: 65.0%
- Guillemots: 4.0%
- Heron: 3.0%
- Gulls: 26.0%
The birds we found were in many different conditions
From dying... to decomposed

Photos credit: Sabine Springer, Anna Aherne, John Mc Gann, Catherine Murphy, Noel Craig