



Fisheries Natura Plan for cockle (*Cerastoderma edule*) in Dundalk Bay, 2021-2025

Legal Basis

1. The Minister for Agriculture, Food and the Marine, as a public authority under regulation 27 of the European Communities (Birds and Natural Habitats) Regulations 2011, must exercise his functions so as to ensure compliance with the requirements of the Habitats Directive, the Birds Directive and the 2011 Regulations. The European Union (Birds and Natural Habitats) (Sea-Fisheries) Regulations 2013 (S.I. No. 290 of 2013) provide for a the submission of a draft Fisheries Natura Plan and the appropriate assessment of a plan to identify where sea-fisheries may be allowed to proceed within appropriate guidelines to address risks to protected species and habitats (Regulation 5 assessment) to enable the fulfillment of the Minister's obligations.
2. The Minister for Agriculture, Food and the Marine must also exercise his functions so as to ensure compliance with the requirements of the Common Fisheries Policy (Regulation 1380/2013), with an emphasis on the article 2 objectives of aiming for the environmental sustainability of fisheries in the long term and applying the precautionary approach to fisheries management.
3. The Dundalk Bay area includes both a Special Area of Conservation (SAC) and Special Protected Area (SPA). This Fisheries Natura Plan proposes a series of management measures with the aim of ensuring both a sustainable fishery and the preservation of habitat within these Natura designated areas and Dundalk Bay as a whole.
4. On foot of the plan, a Fisheries Natura Declaration may be issued by the Minister in accordance with Regulation 9 of the European Union (Birds and Natural Habitats) (Sea-Fisheries) Regulations 2013 (S.I. No. 290 of 2013).

Rationale for Mitigation

1. Cockles, bivalves generally and other benthic invertebrates are important sources of prey for a number of species of water bird and seabird in the SPA and depletion of these prey populations could have a significant negative impact on bird populations using the site. Bivalves are an important and necessary food source for a number of bird species such as Oystercatcher, Knot, Shellduck and Common Scoter and depletion of prey could affect the population of these species. Bird populations may be disturbed by fishing vessels, by human disturbance on the shore or other non-fishing activity.
2. Dredging for cockles disturbs sediments to 5cm depth and is indiscriminate and unselective in the capture of non-target organisms which are released back into the environment almost immediately on capture but in the case of suction gear pass through the dredge, pipes, pumps and graders before they are released. A substantial amount of sediment is disturbed and can be displaced downstream depending on currents. This might result in increased sorting and loss of fine materials at the fishing site.
3. The maintenance of stock levels at a sustainable level to ensure a continuing and prosperous fishery is in line with Government and EU policy.

Introduction

This plan sets out the management measures to be undertaken by the vessel owners holding permits to fish Cockle (*Cerastoderma edule*) in Dundalk Bay. The aim of this plan is to ensure a fishery that is sustainable, that minimises ecosystem impact and that further develops on the previous two 5-year plans. This plan seeks to continue the best practice developed over the course of the previous plans while at the same time introducing some additional control measures to ensure long-term sustainability.

Fishing area

The proposed fishing area covers a total of 77.8km² of intertidal sand flat in Dundalk Bay. This larger area has been defined to allow for the inter-annual variability in location of commercial densities of cockles and to enable the fleet to avoid areas that may have concentrations of juvenile cockles. In any given year the actual area fished will probably be between 10-20 km² as was the case during the period 2007-2020. The area fished in any given year is determined by the distribution of cockles at densities over 4m², as advised by annual surveys.

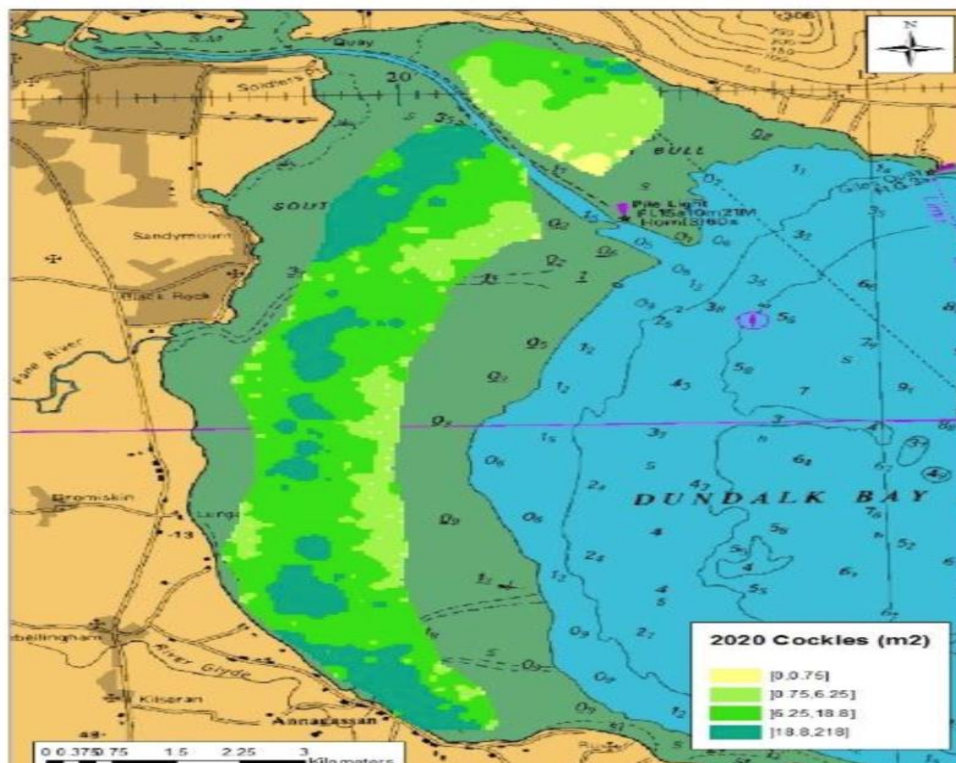


Figure 1. Proposed area for cockle fishing during the period 2021-2025.

Fishery control rules and justification

Various fishery control rules, representing a series of complementary safeguards against over-exploiting the stock, that minimise ecosystem effects and that ensure economic viability of the fishery, are included in the management plan. Specifically, these are rules in relation to:

1. Harvest rates,
2. Minimum legal landing size,
3. The in-season depletion of catch,

4. Seasonal closures to protect waterbirds and allow recovery of habitats,
5. Daily catch allowances to ensure equitable distribution of catch,
6. Gear specifications,
7. Days per week and time restrictions,
8. Access and Fisheries Natura Permits,
9. Vessel monitoring.

1. Harvest rates

The harvest rate rules will determine the Total Allowable Catch (TAC) in any given year of the plan. The following rules, justification is provided, will apply:

- A. At biomass between 1000-1500 tonnes, the harvest rate will always result in 1000 tonnes biomass being maintained post-season;
- B. At biomass >1500 tonnes, the harvest rate is 0.33.

Any proposed change to the harvest rates as outlined above will trigger a review of the entire plan.

Biomass	TAC MI plan with bottom biomass of 1200	Biomass unfished	TAC Old 33% /50%plan	Biomass unfished	New 2021/2025 TAC plan	Biomass unfished
4000	1200	2800	2000	2000	1320	2680
3800	1200	2600	1900	1900	1254	2546
3600	1200	2400	1800	1800	1188	2412
3400	1200	2200	1700	1700	1122	2278
3200	1200	2000	1600	1600	1056	2144
3000	1200	1800	990	2010	990	2010
2800	1200	1600	924	1876	924	1876
2600	1200	1400	858	1742	858	1742
2400	1200	1200	792	1608	792	1608
2200	1000	1200	726	1474	726	1474
2000	800	1200	660	1340	660	1340
1800	600	1200	594	1206	594	1206
1600	400	1200	528	1072	528	1072
1400	200	1200	462	938	400	1000
1200	0	1200	396	804	200	1000
1000	0	1000	330	670	0	1000
800	0	800	264	536	0	800
600	0	600	0	600	0	600
400	0	400	0	400	0	400
200	0	200	0	200	0	200
0	0	0	0	0	0	0

Figure 2. Proposed new TAC plan for 2021-2025.

2. Minimum legal landing size

The legal landing size will be 17mm shell width but operationally, as reflected in the bar spacing used on the grader on board the vessels, the effective minimum landing size will be 22mm shell width.

The higher minimum size is designed to optimise the price and to separate Dundalk cockle from cockle landed in UK fisheries in the market place.

3. The in-season depletion of catch

If catch rates decline to 250kg per vessel per day, the fishery will close irrespective of other harvest rules. In calculating the catch per vessel per day:

- A. The first week's fishing will be excluded because operators are fine-tuning gear at the start of the fishery.
- B. Only vessels that have fished the entire tidal period each day for at least two days each side of the high tide will be included.
- C. The catch data will be provided by fishermen and will be cross-checked with SFPA-issued gatherers docketts.

4. Seasonal closures to protect waterbirds and allow recovery of habitats

- A. The fishery will close at the latest on November 1st.

5. Daily catch allowances to ensure equitable distribution of catch

- A. A daily maximum catch of 1000kg per vessel.

6. Gear specifications

- A. The dredge blade width will be 0.75m in the case of suction dredges and 1.0m in the case of non-suction dredges.

7. Days per week and time restrictions

- A. Fishing will be permitted on tides 4.2m or higher.
- B. Fishing will be allowed on one tide per 24-hour period only.

8. Access and Fisheries Natura Permits

- A. Fishing for cockles by any means in Dundalk Bay will be limited by the requirement to hold a Fisheries Natura Permit.
- B. The number of permits will be limited in line with an eligibility policy published by the Minister.
- C. Hand-gathering will only be permitted at the discretion of the Minister and will be restricted to defined spatial areas and times as well as any other conditions the Minister deems necessary.

9. Vessel monitoring

- A. Vessels operating a GPS monitoring system, as required under the Razor Clam (Conservation of Stocks) Regulations (S.I. No. 206 of 2015), will ensure that the system is fully functioning while fishing for cockles under a Fisheries Natura Permit.