

Fisheries Natura Plan for cockle (*Cerastoderma edule*) in Dundalk Bay, 2016-2020

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 (SI 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 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 (SI 290 of 2013).

Rationale for Mitigation

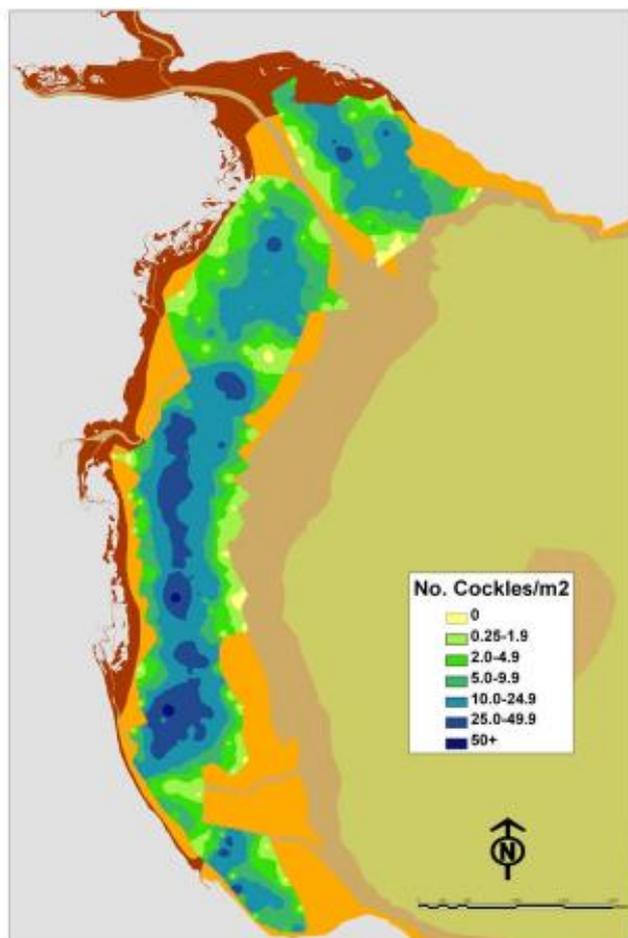
1. Cockles, mussels, bivalves generally and other benthic invertebrates are important sources of prey for a number of species of water bird and seabird in the SPA and depletion of these prey populations could have a significant negative impact on bird populations using the site. Bivalves are an important and necessary food source for a number of bird species such as Oystercatcher, Knot 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 associated with hand gathering of mussels 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. Gathering of mussels removes the mussel bed from the substrate. Gatherers and equipment may cause mortality of non-target species through the use of rakes and trampling.

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.

Fishing area

The total possible 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 20 – 25km² – depending on the variation in the extent of cockle distribution annually. The area fished in any given year is determined by the distribution of cockles at densities over 5m² as advised by annual surveys.

Density of distribution of cockles based on 2011 survey:



Fishery control rules and justification

Various fishery control rules, representing a series of complementary safeguards against over-exploiting the stock, that minimize 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 in relation to annual biomass estimates
2. Minimum legal landing size

3. The in-season depletion of catch
4. Seasonal closures to protect water birds 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 conditions on the fisheries Natura permit
9. Vessel monitoring

1. Harvest rates

The harvest rate (% of biomass) 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 <750 tonnes harvest rate is zero.
- b) At biomass between 750-3000 tonnes harvest rate may be 0.33; at biomass of less than 1,500 tonnes additional precautionary criteria may apply.
- c) At biomass >3000 tonnes harvest rate is 0.50

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

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 per day

- a. When 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.
 - i. The first weeks fishing will be excluded because operators are fine tuning gear at the start of the fishery.
 - ii. Only vessels that have fished the entire tidal period each day for at least 2 days each side of the high tide will be included.
 - iii. The catch data will be provided by fishermen and will be cross checked with SFPA issued gatherers docketts.

4. Seasonal closures to protect water birds 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 1,000kg 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. Fish will be permitted on tides 4.2m or higher.
- b. Fishing will be allowed on one tide per 24 hour period only

8. Eligibility and conditions for fisheries Natura permit

- 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 Razor Clam (Conservation of Stocks) Regulations (S.I. 206 of 2015) will ensure that the system is fully functioning while fishing for cockles under a fisheries Natura permit.