



Item No.B4

By: Assistant Chief IFCO

To: Kent and Essex Inshore Fisheries and Conservation Authority – 25 May 2023

Subject: **PERMITTED COCKLE FISHERY**

Classification Unrestricted

Summary: To report on the surveys for the 2023 Permitted Cockle Fishery

1. Permitted Cockle Fishery 2021 and 2022

The permitted cockle fishery was not opened during 2021, due to insufficient numbers of cockles above the minimum landing size of 16mm being found during the annual surveys. All permit fees were refunded.

The permitted cockle fishery was scheduled to be opened in 2022 as the spring surveys showed sufficient stock, but following industry requested surveys in September 2022, following the extremely hot weather of last summer, the amount of sizeable stock was shown to have decreased significantly and the decision was made to not open the fishery. All permit fees were refunded.

2. Moving forwards following the review of cockle fishery management

The review of cockle fishery management within the District (TECFO review) has concluded that the previous setup of the Permit Fishery does not result in a sustainable fishery due to too many vessels, working patches of ground which are too small and taking too much in one go. The fishery has not been consistent, with only four fishing trips in the past 8 years and elements of the management needs change in order to address this significant problem.

In framing the 2023 fishery as the first opportunity to start making a sustainable fishery, officers are making best endeavours to set up a fishery which can develop and evolve over time. But as guiding principles the officers have had regard to establishing a small-scale fishery which takes less per trip to enable a

more flexible approach to area management and fleet management. This will enable the Authority to open up more beds across the District and spread the fleet out more both spatially by encouraging different boats to go to different beds and temporally by spreading out the effort and allowing the ground time to recover between fishing trips.

The ongoing "review and development of management of cockle fisheries with the District" (TECFO review) has resulted in a number of decisions being made by the Authority already regarding the future of the permitted cockle fishery, including for this year.

At the October 2022 cockle review meeting, Members approved the following recommendations for the 2023 permit fishery:

- The permit fishery will issue both categories of permit – category 1 and category 2
- The permit fishery will be opened for category 2 permits four weeks prior to opening the fishery for category 1 permits
- The decision on whether to permit TECFO-licenced vessel for the outside area will be taken once the 2023 stock assessment has been completed.
- The outcomes of the permit fishery consultation concerning tonnages per category will be discussed as part of the 2023 management discussion after the 2023 surveys.
- Following the completion of the spring 2023 surveys, decisions will be taken on the flexible permit fishery for next year taking into account the above decisions.

3. Appropriate Assessment

The Authority is required under Regulation 48(3) of the Conservation (Natural Habitats) Regulations 1994, Wildlife and Countryside Act 1981 and the Countryside and Rights of Way Act 2000 the Authority to give notice to Natural England of intention to issue permits to fish for cockles within designated SSSI, SPA and Ramsar inter-tidal sites. The Authority is also required to submit an "Appropriate Assessment". This assessment includes survey data, fishery monitoring and details of mitigation implemented to ensure that there is no adverse impact upon these sites as a result of the Authority's action. The Appropriate Assessment has been discussed informally with Natural England and a formal submission will be sent taking into account the Authority's decisions regarding this paper.

4. Number of Permit Applications

The process for the management of this fishery is that anyone wishing to apply for a permit is required to apply before 31 March in that year and all stock assessment surveys are completed before the May Authority meeting. This ensures that the Authority can be presented with a complete picture of the fishery, including the amount of stock available and the number of vessels wishing to work it.

For 2022, the number of permit applications was 26. For 2023, the number of applications is 36. Thirty three of these applications are for Category 1 permits which would be permitted, should the Authority decide to issue Category 1

permits, to take up to 13.6m³ per trip. Three of these applications are for the smaller Category 2 permit, which permits up to 3.4m³ per trip.

5. Spring 2023 Cockle Stock Surveys

Stock surveys commenced at the beginning of April 2023 and concluded on 9 May 2023. At this time of year, the cockles are coming into condition for their spring spawning following the winter dormant period. These surveys use Day grabs, deployed from both FPV Tamesis and FPV Nerissa, and cover a total area of 37.6 km² (14.5 miles²).

The areas surveyed cover the Buxey, Dengie and Ray Sands, Minnis Bay and Leysdown. A survey was also conducted for the third year running on a potential new bed in Area 14, South Margate Sands. These areas include all of the current main production areas outside of the TECFO (a chart showing the production areas is attached at Appendix A).

Analysis of the survey data collected has been completed. The survey shows that Area 7 - Ray, Dengie and Buxey Sands (highlighted in orange on figure 1) and Area 14 - Minnis Bay (highlighted in red on figure 1), South Margate Sand and Area 10 - Leysdown (highlighted in green on figure 1) all contain stocks of cockles. All three areas appear to have been subjected to similar conditions as the main TECFO beds over the past year, in that the cockles are present in good numbers but are small and the resulting biomass is relative low.

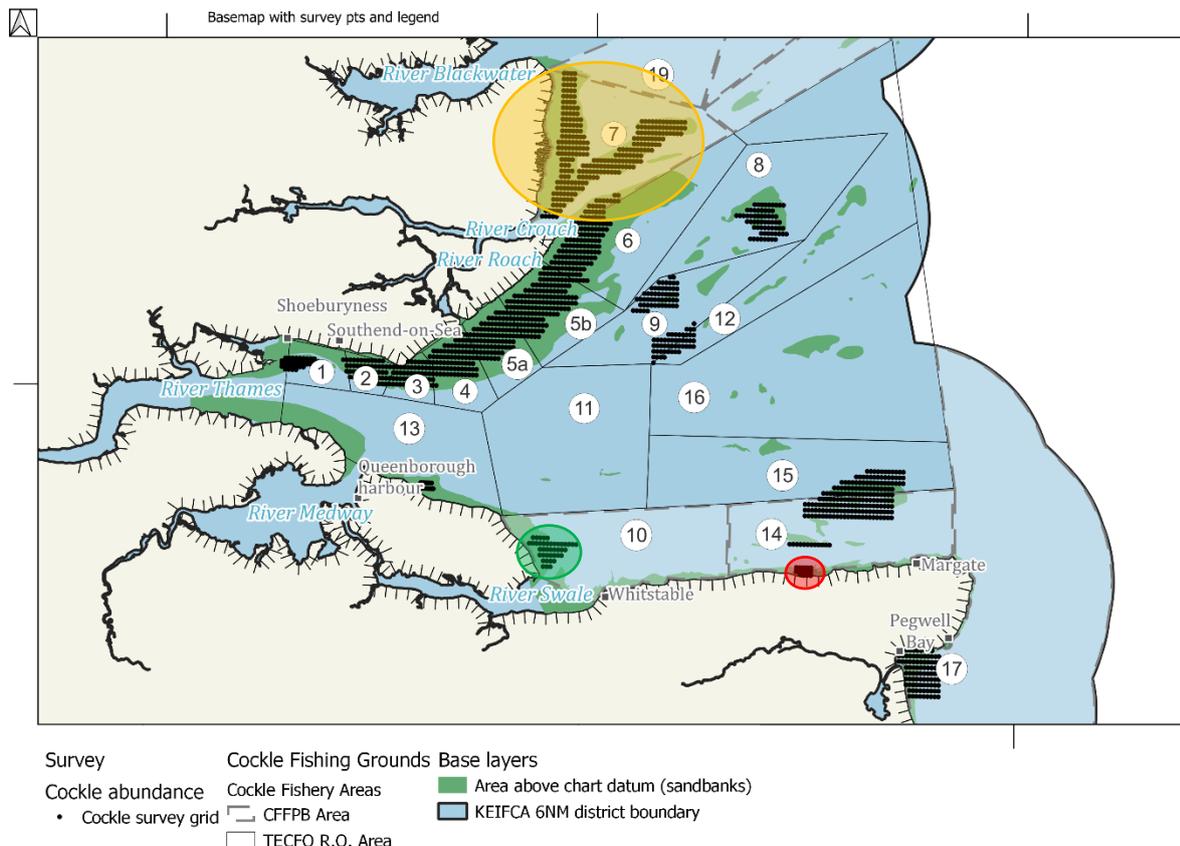


Figure 1. Chart showing sampled beds across the Thames Estuary

Area 14 is notable in that a majority of the cockles are already above the default 16mm minimum size. Within Area 14, the main bed is Minnis Bay (circled in red

in Figure 1.) which does contain good densities of cockles but the site is only 1.2km² in size and, as reported last year, requires other areas to be open at the same time to permit access by a fleet of 36 vessels so as to spread effort out.

Area 7 is in the opposite position where less than 10% of the adult stock is currently above 16mm in size and so whilst it does contain a sufficient number of cockles suitable for harvesting – indeed there are the most individual cockles on the ground since the 2019 survey, it also has the lowest biomass figure recorded since 2015. Therefore, to ensure the stock and ground is sufficiently protected, officers are planning to undertake further surveys of this area at the end of June in order to gather more information on growth rates.

Area	Total adult biomass (tonnes)	>16mm biomass (tonnes)
Area 7	2567	243
Area 14	470	387
Area 10	53	18
TOTAL	3090	648

Of these two main areas, only Area 14 contains sufficient stock to open under the current Management Plan criteria which specifies that for opening a fishing area there should be a minimum of 350 tonnes. This figure is based upon the default for the fishery being the historic 11-12 tonne landings (330 – 360 tonnes per fleet trip based on a 30-vessel fleet). Area 14 contains sufficient stock for one trip of the fleet based upon the default Category 1 permit catch allowance of 12 bags/tonnes.

The reality of the current stock situation is similar to recent years in that stock levels are not at a level to be able to operate a sustainable fishery whilst utilising the management measures provided for in the permit byelaw. The areas of higher density cockles are too restricted and the number of vessels too high to be able to remove 12 tonnes/bags of cockles per trip per vessel. This approach is not replicable on a year-to-year basis. The two main changes for 2023 which can be made are to reduce the amount of cockles caught by each vessel during a trip which will allow more, smaller areas to be opened up to spread the effort of the fleet. Finally, extending the period of time the fishery takes place over will reduce the compression of effort into a short period of time which means the seabed is turned over very intensively.

7. Limiting the tonnage per trip

Decisions taken by the Authority over the past two years have indicated that the permit fishery should, moving forwards, be a small-scale fishery with limited tonnages. The current byelaw only provides for two categories of permit, Category 1 and Category 2, with Category 1 permits either being 12 tonnes or 6 tonnes per trip, and Category 2 permits either being 3 tonnes or 1.5 tonnes per trip.

Category 1 permits have been the default for the fishery since the byelaw was made in 2014 and also for the fishery prior to that. Most of the cockles in the District have been caught in 12 bag/tonne catches since the early 1990s. However, this default is not working for the permit fishery. On 12 tonnes per trip the fleet of 33 Category 1 vessels would catch up to 396 tonnes per fleet trip, with the addition of the 3 Category 2 vessels this would give a total of 414

tonnes per fleet trip. Even reducing the tonnage under a Category 1 permit down to 6 tonnes – the only other permitted tonnage – wouldn't achieve the sustainability which is sought for the number of permit applications which we have received. If the tonnages are halved (6 tonnes for a Category 1 and 3 tonnes for a Category 2) the total for the fleet would be 207 tonnes per trip. For comparison, the TECFO fleet takes around 168 tonnes per fleet trip, from some of the most sustainable and productive beds in the UK.

We need to be mindful of how we reduce the concentration of effort, balancing the needs of the industry, but an irregular, unsustainable fishery is in nobody's interests and a fishery which operates, albeit at a low volume, low level, is far more beneficial than a fishery which does not open at all. If a small fishing opportunity is made available then individual fishers can make an informed decision about whether to take part or not.

Restricting all permits to Category 2 only would enable the Authority to open a 3 tonne per trip fishery for all vessels.

Three tonnes per trip allows vessels far more flexibility in where individual vessels work and allows the fleet to exploit smaller beds of cockles than has been possible whilst operating on a 12-tonne limit. This makes full use of the stocks within the District and allows an economic return by the fleet.

Three tonnes is a similar landing quantity to that permitted in the Wash fishery where vessels are allowed to land 2 tonnes per trip. Whilst the Wash is a hand raked fishery, the vessels used are primarily similar sized vessels to those used within the Thames Permitted Cockle Fishery in recent years.

All Category 1 permit holders would be offered the opportunity to transfer to a Category 2 permit and have the difference in permit fee refunded, alternatively they could withdraw their application and have all of their permit fee refunded. This would result in a fleet of no more than 36 Category 2 vessels, each permitted to take no more than 3 tonnes per trip. This would meet the guidance of the Authority to start the establishment of a small-scale fishery with the 36 vessel fleet taking 108 tonnes per fleet trip.

8. Limiting the number of trips per week and spreading out the effort

The 350 tonne per area requirement in the Management Plan would need to be modified for the 2023 fishery to start to explore this new approach. The overarching idea is to encourage the fleet to spread out its effort, to locate new stocks of cockles which they have not had the opportunity to do with a time-compressed fishery in recent years and to allow fishers to take advantage of the fishing opportunity available to them.

If vessels spend extensive period of time in one area in an attempt to take their catch of 3 tonnes/bags then the area could be closed. The minimum catch rate which is economically viable for a cockle vessel is approximately 1 tonne per hour therefore officers would be reviewing any trips where total fishing time within an area was in excess of three hours per vessel.

Officers would therefore recommend the removal of the 350 tonne per area requirement criteria for the 2023 fishery to allow the smaller scale fishery to take

advantage of smaller beds of cockles and spread out the effort of the fleet. for further review after the season.

One trip per week of this fishery would allow the larger number of vessels to work without being forced into small patches of ground together, with the fishery being limited to four weeks. In a situation where all of the TAC is not taken, remaining TAC can be split between the fleet to allow a more efficient uptake of the available stock – essentially this means that if there is stock remaining at the end of the four-week period, the remaining TAC can be split amongst the permit holders to allow all of the available TAC to be taken. Again, 3 tonnes per trip allows this to be undertaken as a much finer scale than was possible with a 12 tonnes fishery.

Officers are recommending opening the fishery at the start of September which would allow for tie-in with the TECFO fishery in terms of transport and cooking of cockles as well as allowing a four week fishery to take place during the summer when the cockles have had as much time as possible to grow but before poorer weather starts to limit small vessel operations in the autumn, which is often common during October.

9. Classification of shellfish beds

Bivalve mollusc (shellfish) harvesting areas are classified according to the extent of microbial contamination as shown by monitoring of E. coli in shellfish flesh. Treatment processes are stipulated according to the classification status of the area. In all cases, the health standards in Annex III of EU Regulations must be met. Molluscs must not be subject to production or collected in prohibited areas. The Food Standards Agency (FSA) has statutory responsibility for ensuring that monitoring and classification programmes are in place to meet legal requirements.

This is operationalised through the local authority environmental health teams who arrange for sampling to be carried out on a regular basis for all commercial shellfish beds. Most areas of the Thames have regular sampling undertaken, but Areas 10 and 14 are not currently classified as they have not been commercially viable under the recent management measures. They now contain sufficient stocks to manage in the manner discussed above, and therefore the next step, if the Authority is minded to approve the recommendations is to work with the local environmental health teams to ensure that these areas are classified.

Normally this process is initiated by industry as it is not a KEIFCA statutory responsibility but in the spirit of developing this new style of cockle management and setting up a small-scale fishery, officers have already had informal conversations with the local environmental health teams and will do this more formally if the recommendations are approved.

10. Vessel Monitoring Systems

Taking into consideration the longer opening period being recommended for the fishery, the much wider spatial area recommended to be opened, and the fact that the TECFO fishery and the permit fishery will be open at the same time; officers are setting out an expectation that all vessels should operate a Vessel Monitoring System (VMS). All >12m vessels are already required to be fitted with

a VMS+ system which its for example utilised in the management of the TECFO fishery. The majority of <12m vessels will now have been fitted with an IVMS (Inshore VMS) system although the national legislation mandating its use has yet to be enacted through parliamentary process. The permit byelaw does provide a mechanism under the permit conditions where a vessel may be required to have a VMS unit fitted. Officers will be exploring the route to enacting this provision prior to the fishery starting.

11. 2023 Fishery Management

Following consideration of the previously discussed items I **RECOMMEND** the following management measures.

Recommendations:

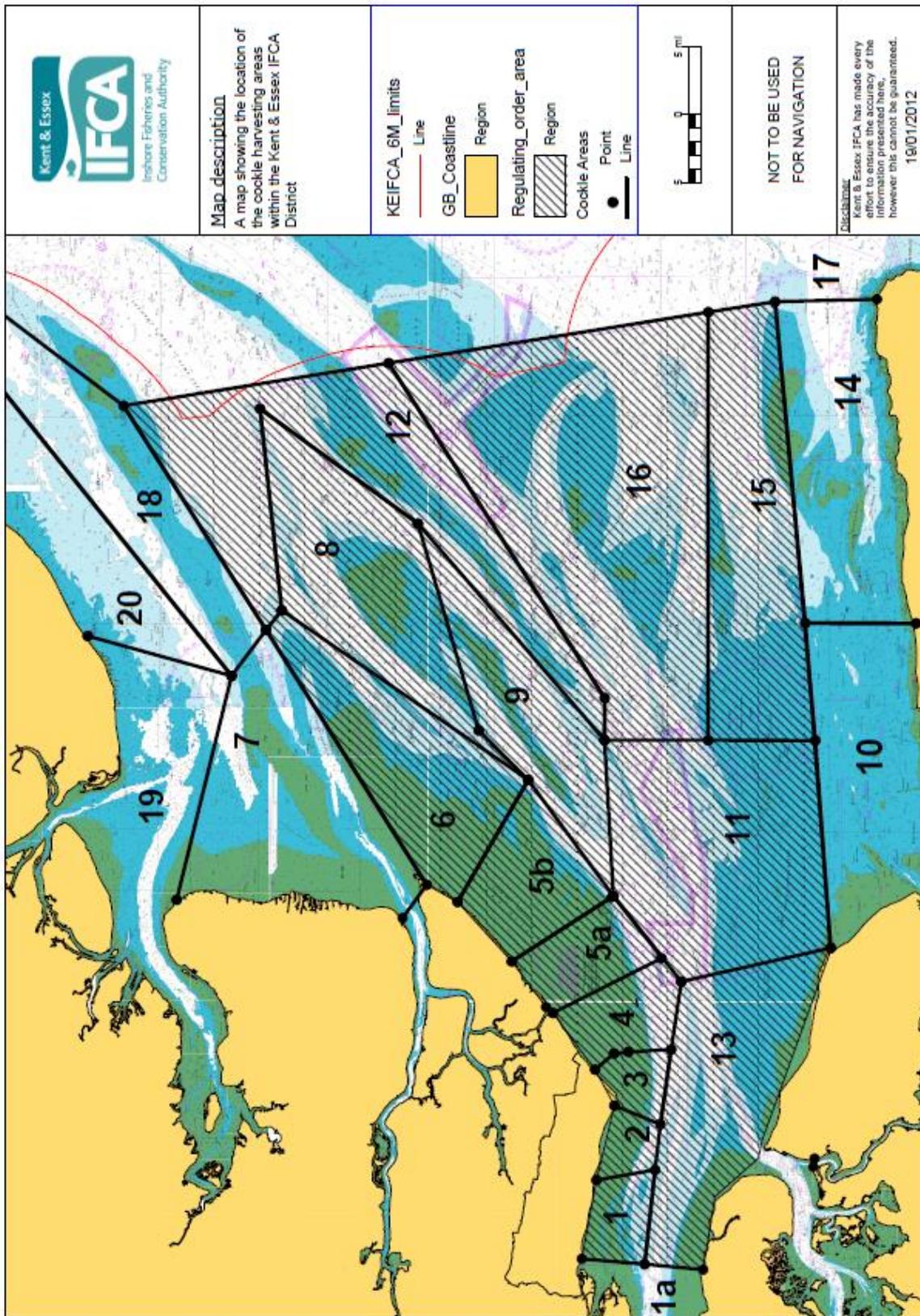
In respect of the Permitted Cockle Fishery

- (a) No Category 1 permits shall be issued. All Category 1 applicants will be given the opportunity to convert their application to a Category 2 permit application and have the difference in permit fee refunded or withdraw their application entirely and have the whole permit fee refunded.
- (b) The Management Plan requirement that any open areas shall contain a minimum of 350 tonnes of cockles shall be waived for the 2023 season, subject to continual review throughout the fishery.
- (c) The Total Allowable Catch (TAC) should be set initially at 432 tonnes and that information related to the stocks will be continually reviewed throughout the season to ensure sustainability.
- (d) Reallocation of TAC, and therefore extension of the fishing season, may be made in the event of any remaining TAC.
- (e) All areas shall be opened to fishing, and that information related to fishing activity, catch rates and vessel density will be continually reviewed throughout the season to ensure sustainability.
- (f) That the Chief IFCO be authorised, after consultation with the Chairman and Vice Chairman, to implement changes to fishing controls to ensure future sustainability including for the purposes of (b). These will be communicated to Members following decisions being made.
- (g) That the fishery will commence at 1200 hrs on 4 September 2023.
- (h) Provisional fishing allocations will be as follows, this will also be subject to further amendment;
- (i) The fishing season will be divided into weekly specified fishing periods which will run from 1200 hrs on Monday to 1200 hrs on Friday and during these periods permit holders will be permitted to make the following specified numbers of landings.

Dates	Specified landings per period
4 September – 29 September	1

- (j) The maximum quantity of cockles that may be landed or carried on board will be 3.39m³/125 baskets per fishing trip (approx. equivalent 3 tonnes).

The Authority is asked to **APPROVE** the above recommendations.



A chart showing the cockle production areas within the Kent and Essex IFCA District