



Agenda item B3

By: Assistant Chief IFCO

To: Kent and Essex Inshore Fisheries and Conservation Authority – 26 May 2022

Subject: Cockle TECFO Licenced Fishery Management

Classification **Unrestricted**

Summary:

This report provides a summary of the spring 2022 cockle stock assessment surveys and outcomes of the annual cockle licence holder meeting. Resulting recommendations on the management of the 2022 licenced cockle fishery inside the Thames Estuary Fishery Order area are included in this report and members are asked to review and approve this recommended management of the 2022 cockle fishery.

Recommendations:

Note: If additional licences are issued it will be necessary to review management allocations.

In respect of the Thames Estuary Cockle Fishery Order:

- (a) The Total Allowable Catch (TAC) should be set initially at 5852 tonnes and that information related to the stocks will be continually reviewed throughout the season to ensure future sustainability.
- (b) Allocation of additional TAC, and therefore extension of the fishing season, may be made in the event of significant new beds of cockles being located in the first four weeks of the fishery, to allow time for any necessary survey work. Reduction in TAC, and therefore a reduction in the number of trips, may be made in the event of very poor growth in the size of cockles or in the event of significant mortality of the older cockles which comprise the majority of the adult population.
- (c) 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.

- (d) That the fishery will commence at 1800 hrs on 26 June 2022.
- (e) Provisional fishing allocations will be as follows, this will also be subject to further amendment;
- (f) The fishing season will be divided into weekly specified fishing periods which will run from 1800 hrs on Sunday to 1200 hrs on Friday and during these periods licence holders will be permitted to make the following specified numbers of landings (Reg. No. 7). This will maximise production when meat yields and quality are at their best.

Dates	Specified landings per period
26 June – 29 July (5 weeks)	2
31 July – 23 September (8 weeks)	3
25 September – 7 October (2 weeks)	2

- (g) As part of the specified trips laid out in (f), licence holders will be required to undertake a minimum of 2 trips during the season within Area 6 and no more than 1 trip within Area 15.
- (h) The maximum quantity of cockles that may be landed or carried on board will remain at 13.6m³/500 baskets per fishing trip (approx. equivalent 11 tonnes).
- (i) As is usual it is recommended that sections of Areas 1, 2 and 3 should be closed at all times during the period June - September inclusive. These areas are defined as inshore sections of Areas 1, 2 and 3 from Two Tree Island at Leigh-on-Sea in the West to The Coastguard Station at Shoeburyness in the East and also within the area of Shoeburyness East Beach. (This closure applies only to the area inside the moorings and where there are no moorings closer to the shore than a distance of 300 metres measured from mean high water mark.)

In respect of the licence fee:

- (j) The licence fee will be increased to £6694 in line with RPI of 7.2%.

In respect of the issuing of additional Cockle Fishery Licences:

- (k) That the number of licences should be restricted.
- (l) The Regulating Order gives a right, to those that held a licence last year, to be granted a licence for this coming season and therefore those 14 licences should be granted as adequate stocks are available.

1. THAMES ESTUARY COCKLE FISHERY ORDER 1994

1.1 2021 Cockle fishery

As previously reported, the cockle fishery within the area of the Thames Estuary Cockle Fishery Order (TECFO) opened between 20 June 2021 and 8 October 2021 with a total of 16 weeks fishing. During this period a total of 6160 tonnes were landed from within the TECFO area.

1.2 Spring 2022 Cockle Stock Surveys

1.2.1 Method

Stock surveys on the main harvesting areas of the Maplin and Foulness sands commenced on 29 March 2022 over the low ebb spring tides which gave best access to the drying sands that extend out to three miles offshore in some sections (a chart showing the cockle management areas is attached at Appendix A). These surveys took five days to complete, covering a total area of 69.8 km² (22.3 miles²) and a total of 519 quadrat samples were taken. The sandflats were accessed from land using two Honda All-Terrain Vehicles for transportation and cockles were dug out from a 0.1 m² quadrat at each sample point, counted, weighed and the age determined (the method is described in more detail in the annual cockle report). The surveys were undertaken by the Authority's officers in teams of four. It is necessary to complete surveys during periods of spring tides when the ebb tide leaves the sands dry and these tide times result in the surveys being carried out around sunrise.

Whilst undertaking these surveys, additional samples were collected for Marine Ecological Surveys Ltd that are working for DP World to assess whether port dredging has an impact on cockle stocks.

1.2.2 Results

Analysis of the survey results show that, following poor recruitment in 2019 and 2020, there are lower numbers of adult cockles on the Maplin and Foulness Sands (fig. 1). Stock on the Maplin Sands is, from an adult stock perspective, at a reasonable level, although lower than last year as expected and comprised of older cockles which we would expect to lose through natural mortality this year, and small numbers of 2019 and 2020 cockles.

Limited numbers of cockles have been recruited into the stock over the previous two years and the better spatfall seen in 2021 does not yet form part of the commercially available stock as it has not grown sufficiently to reach minimum size.

These 2021-year class cockles are not expected to reach the minimum commercial size of 16mm until the end of this year and so are not included within the TAC, as is normal. As a result, whilst stocks of adult, commercially sized cockles are acceptable, they are approaching the lower end of the normal range and a conservative approach must be taken in the setting of the 2022 TAC.

The graphs below show the latest stock situation.

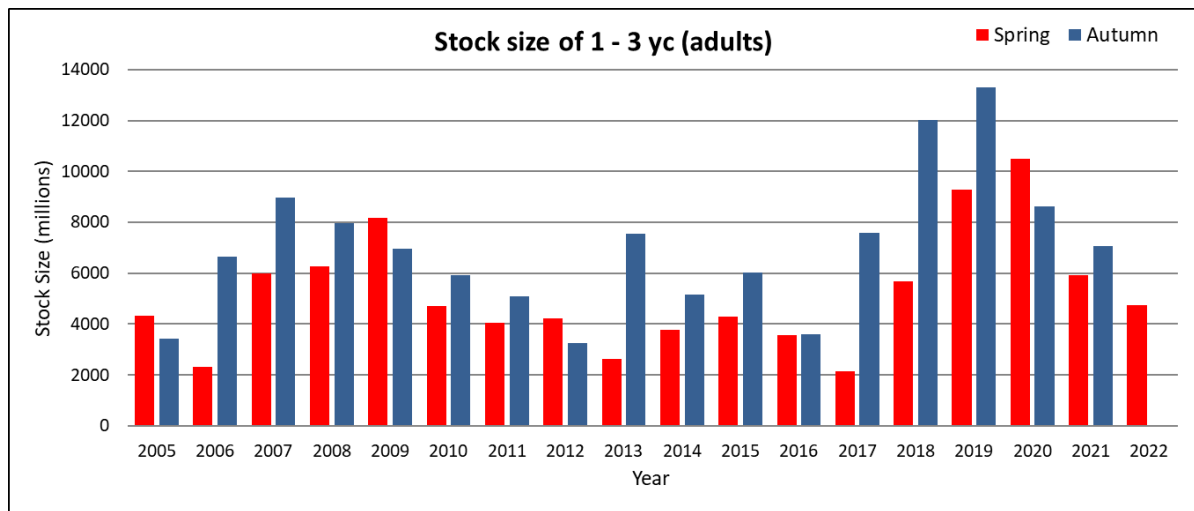


Fig. 1: Abundance of cockles from 2005 to 2022 in the main cockle harvesting areas of the Maplin and Foulness sands.

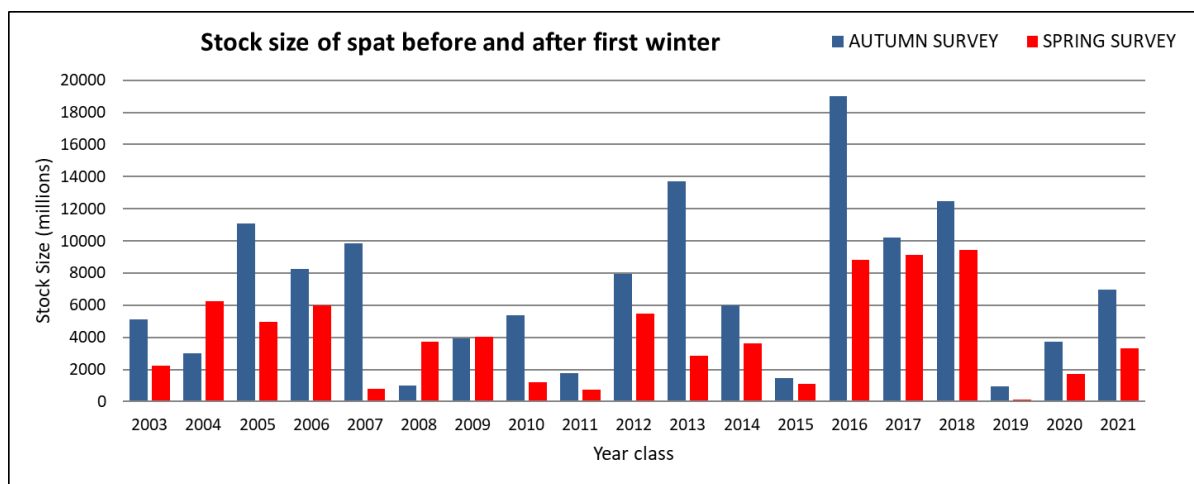


Fig. 2: Abundance of spat before and after the first winter from 2003 to 2022 in the main cockle harvesting areas of the Maplin and Foulness sands.

Surveys of additional cockle grounds beyond the major harvesting areas have also been completed. Areas 8, 9 and 12 have proven to be very productive in recent years, and area 15 (North Margate Sands) produced significant numbers of cockles in 2020 with over 1500 tonnes being removed by the fleet, which was unexpected as this area had not been fished for over 13 years. Areas 8 and 15, which had been so productive in previous years were kept closed in 2021 due to low stock. All of these areas have been considered when setting this years' TAC.

Area 15 was closed by the Authority last year to see if it could receive a spatfall which would allow a more regular, sustainable fishery on this area. The surveys show that this has been successful and there are significant quantities of young cockles on this ground, albeit in a very small, dense patch of seabed. A number of 3 year old adult cockles also remain on the ground. As a result, one trip of the fleet on this area, with no increase in TAC is recommended with potential for further trips if growth is very good.

Areas 8, 9 and 12 do not appear to contain the same numbers of cockles this year as they have in recent years. From the peak in 2019, when the area produced very good quantities of cockles, the stocks have reduced substantially and no cockles were harvested from there in 2021 as the area was closed to fishing. Surveys are ongoing on these areas, however, sufficient stocks are not expected to be found to make them economically viable.

1.2.3 Conclusion and TAC

The extremely poor recruitment in 2019 was in turn followed by a 2020 recruitment event which fell into the lower end of the normal range. Recruitment in 2021 was just below average and should start to reverse the drop in adult stock numbers for next year. However, recruitment during 2022 will be critical in stabilising the adult stock

Analysis of survey data indicates that the recommended Total Allowable Catch (TAC) that can be taken from the beds will be 6006 tonnes. This is a conservative figure taking into account the current stock level across multiple sites as well as the recruitment events of 2019 – 2021.

1.3 Cockle licence holders meeting

On 13 May a meeting was held with the cockle fishery licence holders. The management of the 2022 fishery along with specific dates for the fishery and the number of trips per week were discussed and the majority of the details reported here were agreed by the majority of the licence holders. Licence holders requested that they be permitted, prior to the season, to undertake a yield test of cockles from each harvesting area. This has happened in previous years and officers intend to permit it again. Licence holders also requested that, if the cockles within Area 15 grow quickly as is expected, that consideration be given to allowing more trips of the fleet in that area, even if the overall TAC is not increased.

1.3 2022 Fishery Management

Following consideration of the previously discussed items I **RECOMMEND** the following management measures. If additional licences are issued it will be necessary to review management allocations.

Recommendations:

Note: If additional licences are issued it will be necessary to review management allocations.

In respect of the Thames Estuary Cockle Fishery Order:

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necessary survey work. Reduction in TAC, and therefore a reduction in the number of trips, may be made in the event of very poor growth in the size of cockles or in the event of significant mortality of the older cockles which comprise the majority of the adult population.

- (c) 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.
- (d) That the fishery will commence at 1800 hrs on 26 June 2022.
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The Authority is asked to **APPROVE** the above recommendations.

1.4 Licence Fees

There have been no increases since 2018. This year the intention is to seek the Minister’s consent for an increase in the basic amount in line with an RPI of 7.2%.

The Authority is asked to **APPROVE** that the licence fee will increase to £6694.

1.5 Consideration of Issuing Cockle Fishery Licences - Formal Procedure

The Thames Estuary Cockle Fishery Order gives rights to a licence for those that have held licences during the previous 24 months (section 4(8)(b)). The Authority may also issue, subject to directions given by the Minister, licences in such numbers and to such persons as it may determine as defined in section 4 (5) of the Order.

It will be necessary to proceed with the following formal procedure by considering whether to limit the number of licences that will be issued and if so how many and to whom these should be granted.

As required by the Order, consultation has taken place with those likely to be substantially affected by a limitation on the number of licences issued. This consultation was undertaken via a letter sent to interested parties, who were made aware that they could provide representation in writing or apply to the Authority to speak to this meeting; eight written requests for additional licences were received. These are included in appendix B.

Consideration will need to be given to the level of stocks and future prospects for the fishery. Last year the Authority resolved that no additional licences would be granted for the 2020 fishery and that licences would only be issued to the existing 14 licence holders. Stocks are lower this year than in 2020 and 2021, however the spatfall in 2021 should start to reverse the downward trend in adult stocks. This will be seen with more certainty prior to the 2023 fishery.

Once a decision has been made by the Authority it will be necessary to inform the Minister to allow him to give directions if so decided under Section 4(5) of the Thames Estuary Cockle Fishery Order.

Recommendations:

(k) That the number of licences should be restricted.

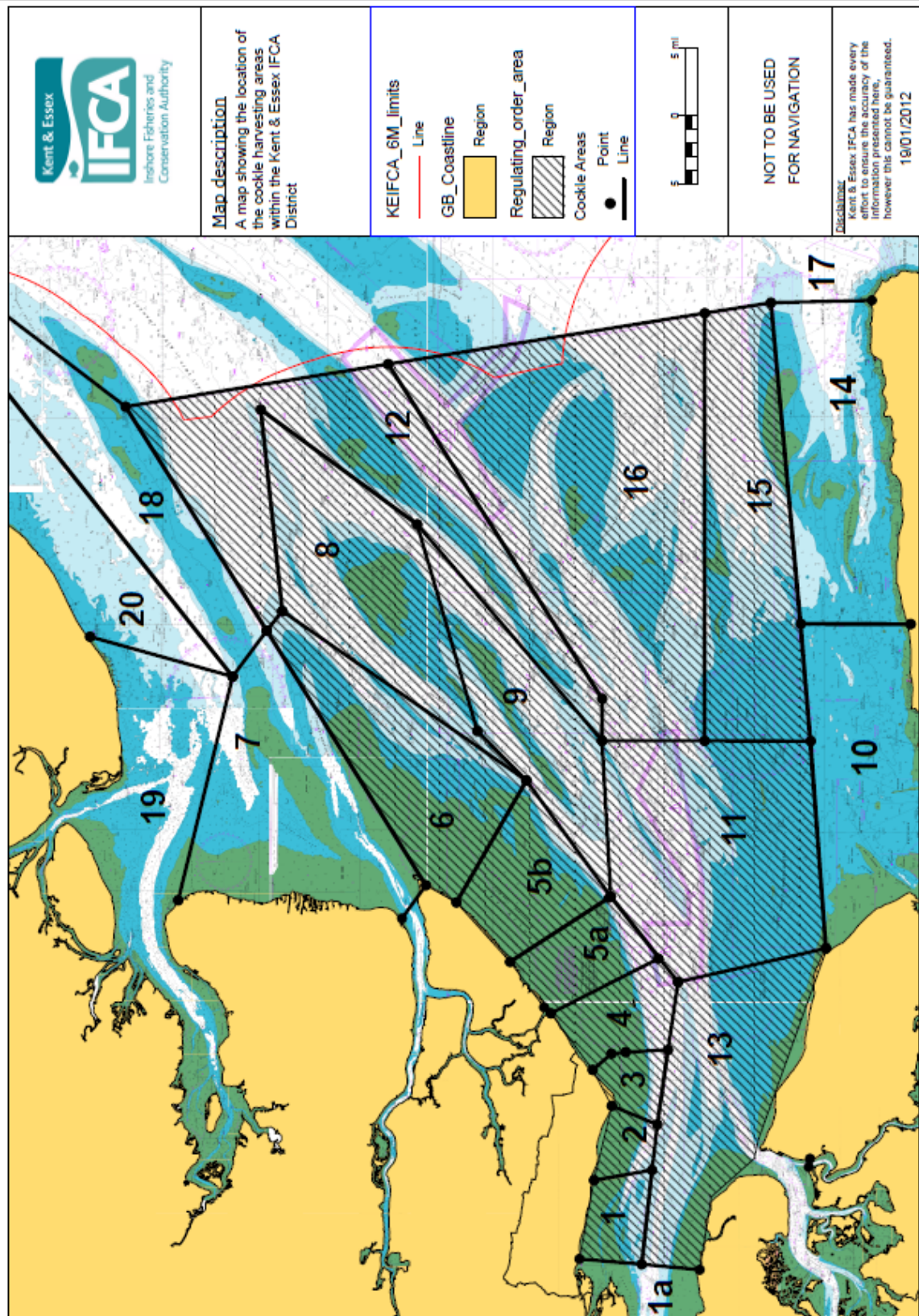
(l) The Regulating Order gives a right, to those that held a licence last year, to be granted a licence for this coming season and therefore those 14 licences should be granted as adequate stocks are available.

1.6 Fishing in Marine Protected Areas

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 is required to give notice to Natural England of intention to issue licences to fish for cockles within designated SSSI, EMS and Ramsar inter-tidal sites. The Authority's management of the TECFO area cockle fishery is subject to a Habitat's Regulation Assessment as it occurs within several European Marine Sites (Essex Estuaries SAC, Mid-Essex Coast SPA, Thames Estuary and Marshes SPA and Outer Thames SPA). The required appropriate

assessment of the impacts of this fishery on protected features has been updated from previous years to be consistent with the approach adopted under the Defra revised approach to managing fisheries in European Marine Sites. VMS data collected in previous years was a key part of the assessment, allowing a 'fishing footprint' to be calculated and further monitoring of VMS data will be an important factor in order to assess any impacts of cockle suction dredging. The appropriate assessment for 2022 was submitted to Natural England for advice and has received a positive response from Natural England. A copy of this appropriate assessment is provided in appendix C.

Appendix A



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