



Agenda item B5

By: Lead Scientific and Conservation Officer

To: Kent and Essex Inshore Fisheries and Conservation Authority – 22 May 2018

Subject: **Cockle TECFO Licenced Fishery Management**

Classification Unrestricted

Summary:

This report provides a summary of the spring 2018 cockle stock assessment surveys and outcomes of the annual cockle licence holder meeting. Resulting recommendations on the management of the 2018 licenced cockle fishery inside the Thames Estuary Fishery Order area are included in this report and Members are asked to review and approve the recommended management of the 2018 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 5390 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 previously unknown or un-surveyed stocks of cockles being located, conversely if by monitoring of catch rates stocks in individual areas are shown to be falling then those areas may have to be closed.
- (c)** That the Chief IFCO be authorised, after consultation with the Chairman and Vice Chairman, to implement changes to fishing controls within the limitations of the agreed TAC.

(d) That the fishery will commence at 21:00 hrs on 17th June 2018.

(e) Provisional fishing allocations will be as follows – 35 trips per boat, giving 385 tonnes per licence holder over the course of the season. This will be subject to further amendment should better than average growth be shown to have occurred during the pre-season yield survey.

(f) The fishing season will be divided into weekly specified fishing periods which will run from 21:00 hrs on Sunday to 12:00 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.

17 th June – 20 th July (5 weeks)	2 specified landings per period
22 rd July – 24 th August (5 weeks)	3 specified landings per period
26 th August – 28 th September (5 weeks)	2 specified landings per period

(g) 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).

(h) As is usual it is recommended that sections of Areas 1, 2 and 3 should be closed at all times during the period June to 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 increase to £6,244

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 2017 Cockle fishery

As previously reported, the cockle fishery within the area of the Thames Estuary Cockle Fishery Order (TECFO) opened between 10 July 2017 and 12 October 2017 with a total of 13 weeks fishing. During this period a total of 4004 tonnes were landed from within the TECFO area.

1.2 Spring 2018 Cockle Stock Surveys

1.2.1 Method

Stock surveys on the main harvesting areas of the Maplin and Foulness sands commenced on 1 April 2018 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 55.9 km² (22.3 miles²) and a total of 416 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 there are more cockles on the Maplin and Foulness sands in this spring 2018 survey compared to any of the previous 16 years (fig. 1). This high number is underpinned by a very large 2016 year class, although it should be noted that a large proportion of this year class is below 16mm. The amount of spat in autumn 2017 was high, although significantly lower than the exceptional spat fall of 2016 (fig. 2) and the spring 2018 survey showed that although there had been normal winter mortality, extremely good quantities of spat remain on the main fishing areas.

Stock on the Maplin and Foulness Sands has increased significantly and TAC will rise as a result. However, due to the young age and small size of the stock, a precautionary approach must be taken to TAC for 2018. Significant recruitment in 2016 and 2017 does provide a good basis for a healthy stock and should continue to have a beneficial effect on future years TAC, subject to winter survival rates.

The graphs overleaf show the latest stock situation.

Fig. 1: Abundance of cockles from 2004 to 2018 in the main cockle harvesting areas of the Maplin and Foulness sands.

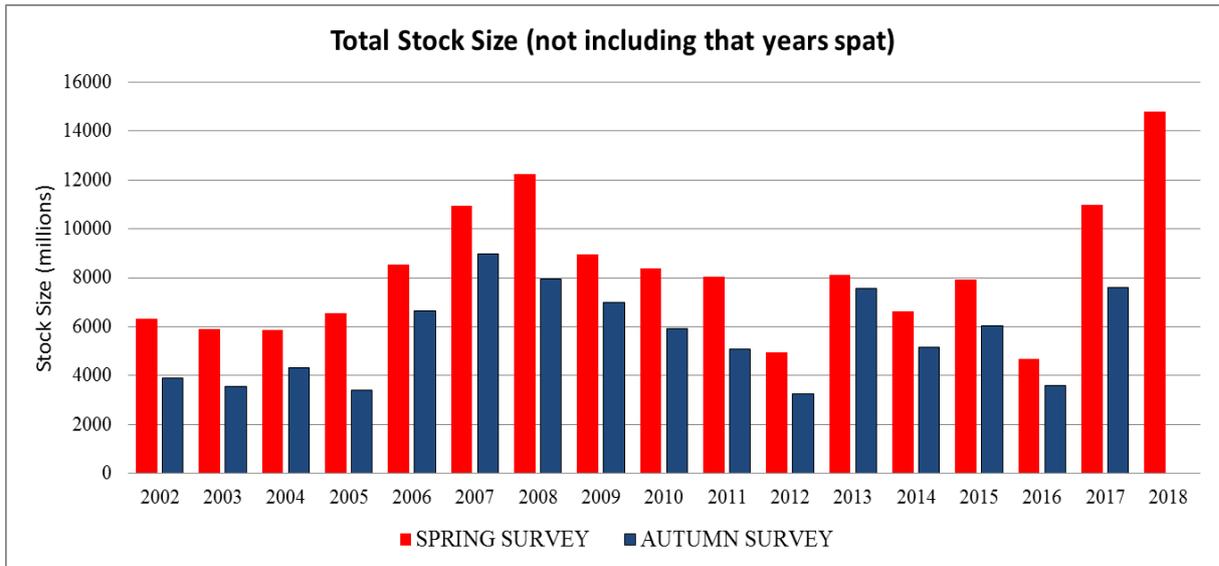
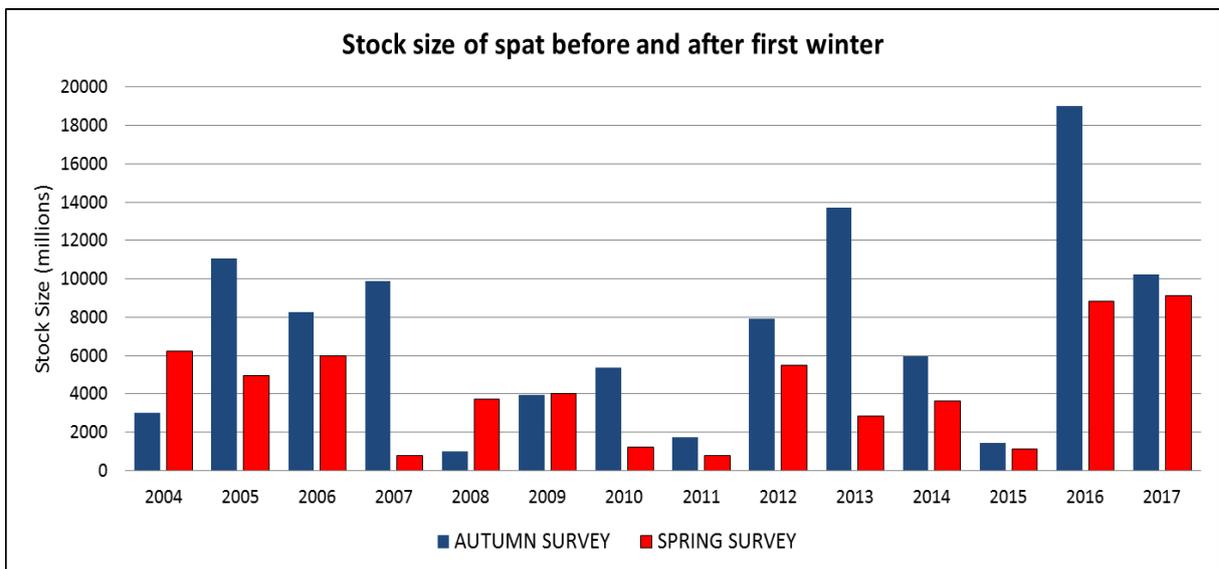


Fig. 2: Abundance of spat before and after the first winter from 2004 to 2018 in the main cockle harvesting areas of the Maplin and Foulness sands.



Surveys of additional cockle grounds beyond the major harvesting areas have also been completed. Areas 2 and 3, which were closed during the 2017 season, were also surveyed during this period and have shown a good recovery in the spring 2018 survey. As a result, these areas will once again be opened for the 2018 fishery.

1.2.3 Conclusion and TAC

Analysis of survey data indicates that the recommended Total Allowable Catch (TAC) that can be taken from the major beds will be 5390 tonnes; 1386 tonnes more than was landed in 2017.

The extremely significant spat fall of 2016 has been followed by a significant spat fall in 2017. The stock continues to benefit from very good survival over the 2016/2017 and 2017/2018 winters which, if impacts upon it are minimised, should bode well for the future of the fishery. Successive strong year classes should be a key point in the sustainability of the fishery.

1.3 Cockle Licence holder meeting

On 8th May a meeting was held with the cockle fishery licence holders at the Tickfield Centre in Southend-on-Sea. The management of the 2018 fishery along with specific dates for the fishery and the number of trips per week were discussed and the details reported here were agreed by majority of the licence holders.

1.3 2018 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.

- (a)** The Total Allowable Catch (TAC) should be set initially at 5390 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 previously unknown or un-surveyed stocks of cockles being located, conversely if by monitoring of catch rates stocks in individual areas are shown to be falling then those areas may have to be closed.
- (c)** That the Chief IFCO be authorised, after consultation with the Chairman and Vice Chairman, to implement changes to fishing controls within the limitations of the agreed TAC.
- (d)** That the fishery will commence at 21:00 hrs on 17th June 2018.
- (e)** Provisional fishing allocations will be as follows – 35 trips per boat, giving 385 tonnes per licence holder over the course of the season. This will be subject to further amendment should better than average growth be shown to have occurred during the pre-season yield survey.
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Note: Within Areas 1 and 2 Southend Borough Council licencing conditions apply.

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

1.4 Licence Fees

Several factors influence an increase in licence fee in 2018. Increased fuel costs, along with extra work around the Appropriate Assessment process coupled with inflation necessitates the rise. This follows two years of no increase in licence fee. The result of all these factors is an increase to £6244.

The Authority is asked to **APPROVE** that the licence fee will increase to £6244

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; 5 written requests for additional licences were received. These are provided 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 2017 fishery and that licences would only be issued to the existing 14 licence holders.

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:

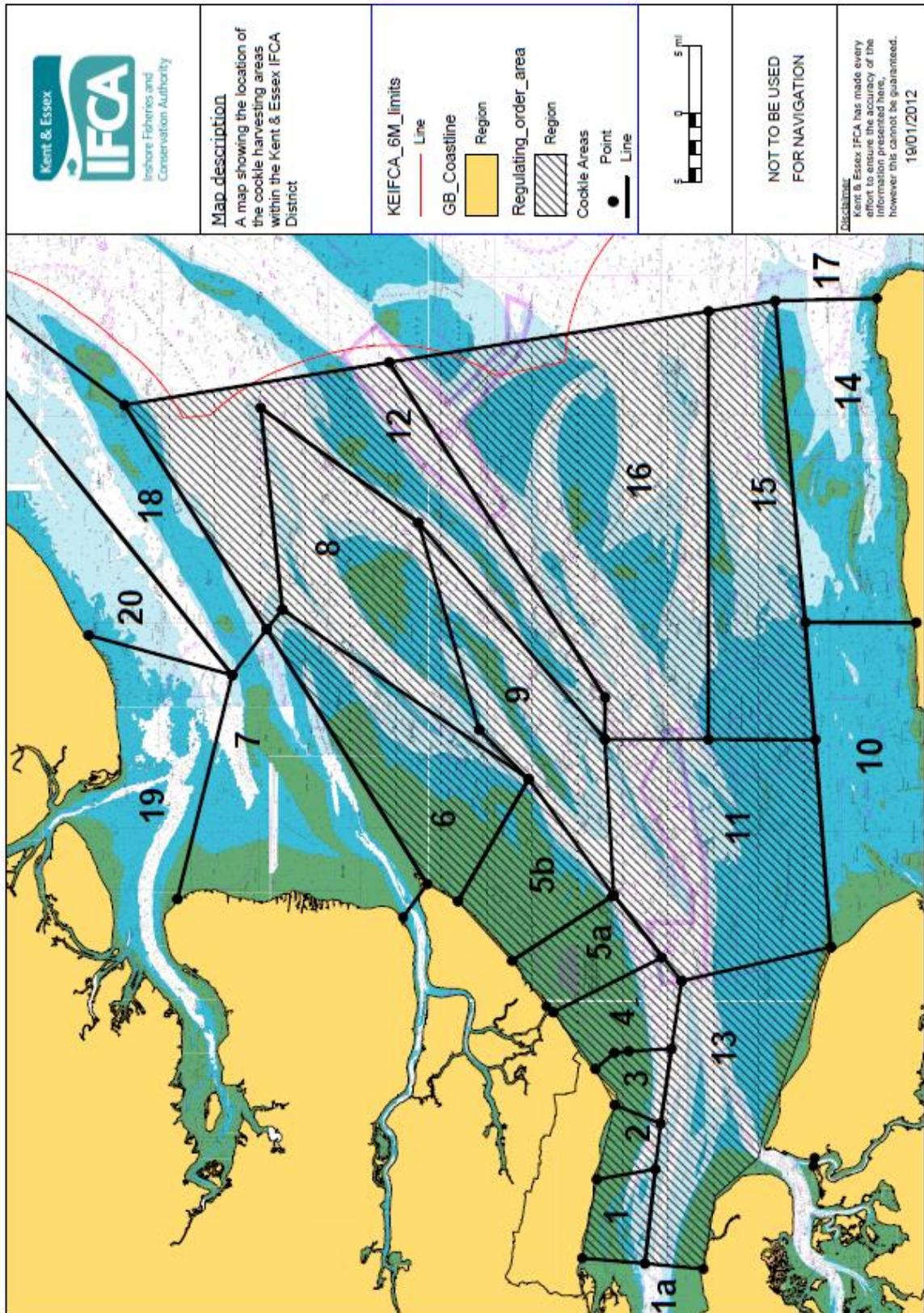
(k) That the number of licences should be restricted.

(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 2018 was submitted to Natural England for advice and we are currently awaiting a response. 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